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PREFACE

BLINDNESS 1965 is the second issue of an annual published by the American Association of Workers for the Blind under a training grant from the Vocational Rehabilitation Administration, Department of Health, Education and Welfare. It is our plan to provide a forum for important and timely articles — with depth — in our own field and in related fields. Experts in the many categories of work with blind persons will be commissioned to conduct the essential research and prepare the articles so that their continuing value will be assured.

Copies of BLINDNESS 1965 are distributed to members of the Association as a function of membership. The Library of Congress, Division for the Blind, will make the annual available for regional libraries in both braille and recorded form.

BLINDNESS 1965

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THE STORY OF THE RANDOLPH-SHEPPARD ACT

By Jennings Randolph
U. S. Senator, West Virginia

For a legislator it is understandably a source of satisfaction when a law carries his name.

Such has truly been the case with my feeling toward the Randolph-Sheppard Act, Public Law 732, 74th Congress, which the honored Sen. Morris Sheppard of Texas introduced in the Senate, and which I sponsored in the House of Representatives. President Franklin D. Roosevelt, on June 20, 1936, signed the legislation into law.

I wish it were possible to name all the people who contributed their labors to the passage of this Act. The proceedings of the American Association of Workers for the Blind contain much of the background of this measure, which authorizes the operation of vending stands in Federal buildings and beyond that, enlarges the economic opportunities of the blind.

Honorable Means of Livelihood

Tribute is due to the valiant workers, devoted to this cause, who placed themselves unstintingly into the action which makes this story, especially those whose efforts have never been mentioned in print, and perhaps never will be. As is generally the case with human endeavors, those of us who have had the privilege of bringing into effect the Federal vending stand program have pushed forward from territory captured by earlier friends of the blind who fought difficult battles to open the minds of society with respect to an honorable means of livelihood for the handicapped. In recognition of all such persons, I would mention one individual especially. He is Leonard Robinson, who, when the Randolph-Sheppard law was passed, was supervisor of Services for the Blind Section, District of Columbia Rehabilitation Service.

From the beginning of my public life, I had been associated with work for the blind as a member of the Lions Club. In 1931-2, as Lions' District Governor of West Virginia, I conducted a campaign for funds to improve health and travel conditions of blind children in the State. Mr. Robinson, then of Ohio, began in 1931 to stump the country for a law similar to the Randolph-Sheppard Act. At a Lions' International Convention in 1934 our paths crossed; we had an opportunity to talk, and from then on we began to labor in separate spheres toward what became the Randolph-Sheppard Act. I mention him as spokesman at that time of some very sincere and dedicated individuals who committed themselves to securing its passage.

I welcome the opportunity to review the history of this law, as it was, is and ought to be. Those who bear responsibility for legislation should bear responsibility for helping the public to understand it, improve it and make it succeed. Moreover, the changing conditions affecting all small business recently have raised some important questions with respect to vending stands for the blind. An opportunity to review their history, meaning and development is especially welcome in the Annual of the American Association of Workers for the Blind, which is a most valuable asset of American society and forms the nucleus of key readers on the subject of blindness in the United States.

Economic and Social Background

Along with a number of members of the American Association of Workers for the Blind, I believed back in the 1930's that something was sadly lacking in the nation's programs for blind people. For those of more than average intelligence and for blind individuals of very limited ability there were some well-developed, carefully thought-out programs for educational and vocational training. But there were serious gaps for the average individual with common sense, ambition and fortitude. This large category contains most sighted people and most blind people.

In this century legislators understand rather well the first principle of modern work for the blind: that blind people differ as much as do the sighted. They also understand the corollary that blind people must not be forced into vocational molds for the convenience of society. By the 1930's it had become evident to the practical minded that something needed to be done which would give blind people a way into our economy of producers, buyers and sellers. It was time and to spare that we recognized there was no cash value in blindness, except in its appeal to pity, the least desirable basis on which to be granted room on earth. The social and communication skills of blind people are not necessarily a point of minimum disadvantage; through necessity and the processes of over-compensation they may become an exceptional advantage. The Randolph-Sheppard law, therefore, was aimed at salesmanship, the aspect of our economy where social and communication skills are most important.

Here a digression is certainly in order to point out that the theory of such an approach was by no means a leap in the dark. An account of early vending stand experiments comes most vividly from a man who was a kind of apostle of the movement, Mr. Joseph Clunk, who had occasion at a meeting of the American Association of Workers for the Blind in 1958 to review his experience as follows:

> "The present day concept of vending stands is reputed to have started about 1895, and it is quite likely that blind persons operated sizable retail businesses in this country long before that. It so happens that I am old enough to remember that about 1910 blind persons were establishing themselves, or were established by their friends, in the industrial plants of Ohio, Michigan and New England, where they ran lunch services of one kind or another. In 1919, when I came into the field of work, the refreshment stand in an industrial plant or in an office building, operated by a blind person, was already one of the accepted methods of employment. However, the installations were widely scattered, and, because of the almost universal installation of poor equipment and of inadequate stocks .... failed as rapidly as they were installed ...."

Canadian Program Initiated

On the same occasion, Mr. Clunk recited a personal experience with the vending stand program of the Canadian National Institute for the Blind, which he had been invited into Canada to initiate and supervise. This program had been inspired by experiments of the New York Commission for the Blind and the Cleveland Society for the Blind. The Canadian program starting almost from scratch, had no special tradition to dispute. Yet by American standards many people found it paternalistic, even authoritarian. American blind people had developed a highly independent ideal for themselves, which had found an outlet in a number of small vending stands. Many of these Mr. Clunk described as poorly operated and "portraying the limitations of blindness and not the competency of blind persons." This, he said, was "due to lack of supplementary business management resulting in poor housekeeping, personal grooming, displays, etc." The operators were no less fiercely independent for that and represented a classic dilemma with all disadvantaged persons: how to give them as much help as is needed without stifling initiative, indeed without stamping out self-respect and personality.

As early as 1921 Senator James Wadsworth, of New York, at the request of his State Commission for the Blind, unsuccessfully introduced a bill to open Federal buildings for the blind. In 1929 Senator Schall of Minnesota introduced a similar bill, to which was added a bureau for the supervision of such stands. The upshot of Senator Schall's effort was extended conversations between workers for the blind and Federal Government officials over the question of dealing with the problem by existing authority of the U. S. Treasury, a custodian of Federal buildings.

In the Spring of 1933, President Franklin D. Roosevelt wrote a letter to the Secretary of the Treasury, requesting that blind persons be permitted to sell newspapers and magazines in buildings under his jurisdiction; this included Post Office buildings. On May 18 a general order was sent out by the Secretary permitting blind persons to sell papers, etc., in buildings where there was space to make this possible without interfering with the public business. This order was followed, however, on June 16 by a second order which restricted the merchandise that could be sold to newspapers and magazines, and further stipulated that no equipment might be installed which could not be removed at night.

Supervisory Resources Lacking

In 1933 the Public Buildings Administration, then a division of the National Park Service, granted to the Rehabilitation Service of the District of Columbia 16 or 17 locations in Federal buildings in Washington.

Without resources for supervision, these stands became unsatisfactory. By 1937 only 11 were in operation. In any case, workers for the blind found the regulations governing them austere, forbidding and unacceptable. Exceptions to this rule were stands which Henry Morgenthau had personally ordered installed in the New York Customs House when he was appointed Secretary of the Treasury January 1, 1934.

Meanwhile, beyond the border in Canada, Joseph Clunk, the American citizen whose belief in the liberty of blind people was well known, was making a name for himself in a highly-successful vending stand program with a "controlled" or "agency management" system. In the United States a number of persons had grown interested in this experiment and demonstration.

On May 19, 1933, Rep. Matthew Dunn of Pennsylvania, a blind member of Congress, introduced a bill designed to set up a bureau under the Post Office Department for the management of stand concessions for the blind. This measure drew the attention of some leaders in work for the blind whom the American Foundation for the Blind called into a conference. It ultimately resulted in the formation of a legislative committee appointed by the Executive Committee of the American Association of Workers for the Blind. The committee consisted of Benjamin Berenstein, New York; O. E. Lineberry, North Carolina; Stetson K. Ryan, Connecticut; Leonard A. Robinson, Ohio; S. Mervyn Sinclair, Pennsylvania; Daniel M. Coleman, Tennessee; Herman Immelin, New York; and Robert B. Irwin, New York.

Field Aroused, Organized, Ready

Acting on suggestions of this group, Mr. Dunn introduced a second bill on March 7, 1934. It failed of passage. However, the field of work for the blind was now aroused, organized and ready for social change. During 1934, 1935 and the early part of 1936, much work was done with Congress by many workers, especially Leonard Robinson, Robert B. Irwin and the legislative committee of the American Association of Workers for the Blind. I became active and introduced H. R. 4688. It was passed in the House and eventually in the Senate in an amended form to become what is known as Public Law 732, 74th Congress, or the Randolph-Sheppard Act.

This Act may be read in its entirety at end of this article. It provided for administration by the Commissioner of Education of a program with three major goals:

1. To make surveys of concession stand opportunities for blind persons in Federal and other buildings in the United States;

2. To make surveys throughout the United States of industries with a view to obtaining information that will assist blind persons to obtain employment;

3. To make available to the public, and especially to persons and organizations engaged in work for the blind information as a result of such surveys.

To make the program practical, the Commissioner of Education was empowered to designate "The State Commission for the Blind in each State, or in any State in which there is no such commission some other public agency to issue licenses to blind persons."

Under Section 5 of the Act, the Commissioner was authorized to make expenditures for implementation at the seat of Government. Commenting in retrospect, the American Foundation for the Blind writers observed, "We workers for the blind sometimes forget that in 1936 this was a new program; and that the pioneers had to move with caution."

Elsewhere they recall the surprising fact that almost without exception, Federal officials in the Executive Branch opposed the passage of any legislation giving blind people any type of preference in the operation of a business on Federal property.

Beginning of Persuasion Job

The Randolph-Sheppard law then was the beginning of a very large job of persuasion, the initiation of which is very well described by Joseph Clunk, who on the basis of his Canadian experience was chosen to be the first Supervisor of Services to the Blind, in charge of implementation.

He has reminisced as follows:

> "When the Office of Education began to administer the Randolph-Sheppard Act in 1937, the supervisor was given a complete description of the results in the District of Columbia by officials of the Public Buildings Administration when they said.... 'We permitted 17 stands to be put in our buildings in 1933, and 11 of these are still in existence. There is nothing in our experience which leads us to believe that blind persons and retail merchandising are compatible, and we intend to close 11 stands as rapidly as circumstances will permit. We do not believe in the program envisioned in the Randolph-Sheppard Act and we want nothing to do with it.'"

It was in this climate that John A. Kratz, Chief of the Federal Vocational Education Board, called a conference on September 14-15, 1936, and assured interested persons that the law would be put into effect as soon as administrative procedures could be set up. In October, "Suggested Principles and Procedures" were issued, covering such subjects as selection of buildings in which to place stands, location of stands in buildings, stand equipment, ownership of concession, equipment and stock, articles to be vended, selection of operator, training of operator and supervision of operation of stands. This last subject was controversial when the legislation had been passed, requiring a good deal of diplomacy for years to come, since the independent spirit of stand operators was involved.

These years are best described in an account of his stewardship given by John A. Kratz at a convention of the American Association of Workers for the Blind in 1941. He was at the time looking forward, as well as backward, since he shared the hopes of many that the Randolph-Sheppard Act would be extended and made more liberal. He wrote:

> "It is opportune for me at this point to give you a brief account of what has been accomplished under the Randolph-Sheppard Act and of the plans for the further development of this program. Under this legislation, designed to improve the economic condition of the blind, the Commissioner of Education is empowered to designate the State commission for the blind, or other public agency, to carry on the work. Such agencies have been designated in 43 States, the District of Columbia, and the Territory of Hawaii. Up to the present time 316 vending stands have been established in Federal buildings and, as a result of the impetus given to the movement by the Federal Government, approximately 600 stands have been established in other than Federal locations."

$800,000 Into Blind People's Pockets

Mr. Kratz explained that with a limited staff, Services for the Blind had nonetheless managed to put $800,000 yearly into the pockets of blind persons, the average earnings being $70 a month, a sum which commanded a much greater purchasing power in 1941 than in 1965. He gave special emphasis to the fact that the administering agencies had insisted stands in Federal buildings should be so equipped and managed that they would provide a real demonstration to the general public. Most significantly Mr. Kratz stated:

> "Methods of operation have been advocated which embody modern, sound principles, continuous supervision by experienced personnel, attractive, efficiently planned equipment, the ownership of both stock and fixtures remaining with the agency. It is very noticeable that where this type of operation, which is known as the Central Control or Agency Management System, has been adopted, the programs have been most successful. Several States are using it and other States are now adopting it.
>
> "The stand programs in the District of Columbia and the State of Arkansas can be used as outstanding examples. The District of Columbia program was established by the Services for the Blind in cooperation with the Vocational Rehabilitation Service of the District of Columbia and the Washington Society for the Blind. This program was started without appropriation or donation and was originally capitalized with borrowed funds. It now has in operation 29 stands, doing a total gross business, according to the report of the four weeks ending June 14, 1941, of $42,311.19, an average gross sales per stand of $1,459.00 and an average net income to operators of over $206.72 per month....
>
> "The success of this method of operation is not confined to the District of Columbia as demonstrated by the program in the State of Arkansas which is operated on the same basis with outstanding results."

Mr. Kratz pleaded for Federal funds to assist with implementation, describing the energetic efforts of his staff in selling the stand program to State officials, including much time and effort in rectifying unfortunate situations, and rewarding experiences in States where assistance was given in preparing legislation. He was looking forward hopefully to larger resources from H. R. 4349 (77th Congress), but this bill failed to pass despite a concerted effort in the House of Representatives in 1941.

Program Rides Out War Years

Nonetheless a tide was running in favor of the vending stand program which was accelerated by the passage in 1943 of Public Law 113, 78th Congress (the Barden-LaFollette Act), which made possible an expanded rehabilitation program for the severely disabled, including the blind. Moreover, the program rode out the disheartening war years which brought shortages of merchandise and equipment.

An extremely important administrative change was wrought in the program on July 16, 1946, when responsibilities for administering the Randolph-Sheppard

Act were transferred from the Commissioner of Education to the Federal Security Administrator. At this juncture an appropriation for equipment was included in the budget. The program was placed under the Director of Vocational Rehabilitation at a most favorable time — just as the war ended when people in all walks of life became rehabilitation minded by association with war casualties. This interest gave rise to great pressure for rehabilitation legislation and many bills were introduced with respect to the subject, but none became law until 1954 when the 83rd Congress passed Public Law 565 and included in this law amendments to the Randolph-Sheppard Act.

Here we note that in the 19 years before the Act was amended the number of stands had increased from less than 100 in 1936 to 1,664, as reported by the Office of Vocational Rehabilitation, in 1955.

The 1954 Amendments to the Randolph-Sheppard Act changed the term "Federal Buildings" to Federal properties. It definitely set forth a preference for the blind in the operation of vending stands on Federal property. It became mandatory that the heads of departments and agencies having control of the maintenance, operation and protection of Federal property draft regulations to insure preference for the blind. It definitely included vending machines as a part of the vending stand program. It transferred the power of the decision for a stand on a Federal property from the custodian of the individual property to the head of each department or agency controlling the property. It provided that four years after the enactment of the amendments the State agency administering that portion of the Rehabilitation Plan affecting the blind be the licensing authority in the State. It permitted the setting aside of funds from the operation of vending stands for the purposes of the purchase of new equipment, maintenance and replacement of equipment, management services, and assuring a fair minimum return to operators of vending stands.

Reaction to Regulations

Initially these changes were well received by workers for the blind. However, the regulations developed from them were taken less happily, as they were turned out by the Public Health Service on April 9, 1955; by Public Welfare on May 7; by the General Services Administration on September 15; by the Treasury Department on January 27, 1956; by the Department of Defense on January 31; by the Federal Register on March 10; by Tennessee Valley Authority on March 26; by the Department of the Air Force on May 3, and by Commerce and Foreign Trade on June 16, 1956.

Never underestimate the alacrity of workers for the blind in organizing themselves to let public officials know their concern. On December 12-14, 1955, a work session was held to formulate more desirable principles. National and State, private and public agencies sent 21 representatives to a conference which was divided into four committees to formulate their thinking under the headings: Basic Objectives, Services Which Should Be Provided to Operators, Financing and Responsible Agencies.

As spokesman of this conference, the American Foundation for the Blind issued a resume in 1957 entitled "Vending Stand Program for Blind Persons." This publication contained extensive background material followed by negative conclusions and positive recommendations of the conference of workers for the blind which had been held in 1955. The essence of the criticism was that certain agencies had taken a negative rather than a positive view of the vending stand program in writing of regulations.

Nevertheless, the law strengthened by the 1954 amendments resulted in a great deal more attention to the vending stand program. Moreover, by this time the vending stand idea in rehabilitation had taken hold to the point where the vast majority of installations were on other than Federal property.

Opened Way for Appeals

Gratifying though this was, the difficulty experienced in securing permits for vending stand installations on Federal properties and problems arising over assignment of vending machine proceeds resulted, during the summer of 1962, in my calling for Senate hearings on the need for additional legislation. As a result of these hearings, the Bureau of the Budget asked each Federal agency having regulations to assure preference to licensed blind persons to amend their regulations to include an appeal provision to be adjudicated by administrative heads of the Federal Department or Agency involved. These provisions enable a State licensing agency to appeal any dispute arising out of 1) the issuance of a permit, 2) assignment of vending machine proceeds, or 3) operating procedures.

Since 1954 the vending stand program has continued to grow at a steady pace on both Federal and non-Federal property. Major emphasis has been placed by the States on the establishment of better equipped and more attractive stands and on the improvement of operating techniques which would result in higher earnings for blind operators. The following reflects program growth in terms of total number of vending stands, operators, average net earnings, and gross sales since fiscal year 1952:

ACCUMULATIVE VENDING STAND REPORT (1952-1964)

Years	Total Number of Vending Stands	Total Number Operators Emp.	Average Net Earnings of Operators	Gross Sales
1952	1,479	1,513	$1,956	$18,655,763
1953	1,543	1,581	2,209	20,612,276
1954	1,599	1,659	2,193	21,972,549
1955	1,664	1,721	2,345	23,538,907
1956	1,727	1,804	2,532	25,849,730
1957	1,830	1,924	2,654	28,938,692
1958	1,901	1,998	2,833	31,683,474
1959	1,982	2,111	3,354	34,752,954
1960	2,078	2,216	3,688	38,219,340
1961	2,174	2,332	3,900	42,057,385
1962	2,257	2,425	4,140	45,737,979
1963	2,365	2,542	4,392	49,512,287
1964	2,442	2,641	4,452	53,916,331

The 1964 figure for average operator earnings of $4,452, of course, takes into account all operators in the country. In some States, the average annual earnings are in excess of this average and are substantially higher than the earnings of many people in management, sales and related work.

The Randolph-Sheppard Vending Stand Program has provided unique opportunities for substantial employment of capable blind businessmen, but it has made an even greater contribution in the demonstration of the abilities of blind persons. On a national basis, these efficient businessmen who happen to be blind persons, can, by means of daily contacts with the general public, do more to establish a positive image of the competitive abilities of a blind person than any other media of public relations.

Automation Posed Its Problems

During the past several years, automatic food vending has posed an ever increasing threat to the Randolph-Sheppard Vending Stand Program. As machine designs are perfected and servicing techniques improved, automatic vending is having a considerable impact on the income of existing vending stand locations and is invading a large percentage of new locations suitable as vending stand opportunities for the blind. As a means of counteracting these encroachments in Federal locations, there is often assignment of vending machine proceeds to the operator of a vending stand within the building.

A far more significant development is the establishment of automated Randolph-Sheppard vending stands. There is a rapidly increasing number of automated vending stand locations where blind operators efficiently load and clean the machines, provide preventive maintenance, and supply the vital liaison with customers. Although sighted assistants are required to clear and clean the larger automated cafeterias, at least two-thirds of the total management and labor required for even these large locations can be performed by blind persons. Carefully selected food service organizations (vending companies) usually provide and maintain all equipment and daily food supplies on a subcontract basis with the State vending stand program. Initial success indicates that a large number of new locations will be of this nature. The very fact that installation cost will be absorbed by private industry will enable the State agencies to promote their programs without excess expense.

VRA Plans Training Workshops

Another current development in some State agencies is the practice of assigning more than one licensed blind operator to large-volume locations. Each operator of these multi-operator vending stands must have an active voice in the management of the vending stand and enjoy all the rights inherited from the licensing. This procedure is resulting in fairer division of profit among the blind workers and the employment of additional blind persons.

The Vocational Rehabilitation Administration is now planning various training institutes and workshops for the purpose of upgrading the quality of management services offered to the vending stand operators and is encouraging the State agencies to hire additional management staff. Adequacy of these services could result in the vending stand program becoming sufficiently competitive to double the employment opportunities it offers to the blind. This will be a significant and most substantial development.

APPENDIX I

(PUBLIC — NO. 732 — 74TH CONGRESS)
(H. R. 4688)

AN ACT

To authorize the operation of stands in Federal buildings by blind persons, to enlarge the economic opportunities of the blind, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of providing blind persons with remunerative employment, enlarging the economic opportunities of the blind, and stimulating the blind to greater efforts in striving to make themselves self-supporting blind persons licensed under the provisions of this Act shall be authorized to operate vending stands in any Federal building where, in the discretion of the head of the department or agency in charge of the maintenance of the building, such vending stands may be properly and satisfactorily operated by blind persons.

SEC. 2. (a) The Office of Education in the Department of the Interior, subject to the direction of the Commissioner of Education and such rules and regulations as he may, with the approval of the Secretary of the Interior, prescribe, shall —

(1) Make surveys of concession-stand opportunities for blind persons in Federal and other buildings in the United States;

(2) Make surveys throughout the United States of industries with a view to obtaining information that will assist blind persons to obtain employment;

(3) Make available to the public, and especially to persons and organizations engaged in work for the blind, information obtained as a result of such surveys;

(4) Designate as provided in section 3 of this Act the State commission for the blind in each State, or, in any State in which there is no such commission some other public agency to issue licenses to blind persons who are citizens of the United States and at least twenty-one years of age for the operating of vending stands in Federal and other buildings in such State for the vending of newspapers, periodicals, confections, tobacco products, and such other articles as may be approved for each building by the custodian thereof and the State licensing agency; and

(5) Take such other steps as may be necessary and proper to carry out the provisions of this Act.

(b) The State licensing agency shall, in issuing each such license for the operation of a vending stand, give preference to blind persons who are in need of employment and have resided for at least one year in the State in which such stand is to be located. Each such license shall be issued for an indefinite period but may be terminated by the State licensing agency if it is satisfied that the stand is not being operated in accordance with the rules and regulations prescribed by such licensing agency. Each such license for the operation of a vending stand in a Federal building shall be subject to the approval of the Federal agency having charge of the building in which the stand is located. Such licenses shall be issued only to applicants who are blind within the meaning of this Act but are able, in spite of such infirmity, to operate such stands.

(c) The State licensing agency designated by the Office of Education is authorized, with the approval of the custodian having charge of the building in which the vending stand is to be located, to select a location for such stand and the type of stand to be provided.

SEC. 3. (a) A State commission for the blind or other State agency desiring to be designated as the agency for licensing blind persons for the operation of vending stands as provided in this Act shall, with the approval of the governor of the State, make application to the Commissioner of Education and agree —

(1) To cooperate with the Commissioner of Education and with the division of vocational rehabilitation of such State in training, placing, and supervising blind persons;

(2) To provide through loan, gift, or otherwise, for each blind person licensed to operate a stand, an adequate initial stock of suitable articles to be vended therefrom;

SEC. 4. The Commissioner is authorized to cooperate with the State boards for rehabilitation of handicapped persons, established by the several States pursuant to the Act entitled "An Act to provide for the promotion of vocational rehabilitation of persons disabled in industry or otherwise and their return to civil employment", approved June 2, 1920, as amended and supplemented, in carrying out the provisions of this Act.

SEC. 5 (a) The Commissioner is authorized to make such expenditures out of any money appropriated therefor (including expenditures for personal services and rent at the seat of government and elsewhere, books of reference and periodicals, for printing and binding, and for traveling expenses) as he may deem necessary to carry out the provisions of this Act.

(b) The Commissioner shall, in employing such additional personnel as may be necessary, give preference to blind persons who are capable of discharging the required duties, and at least 50 per centum of such additional personnel shall be blind persons.

SEC. 6. As used in this Act—

(a) The term "United States" includes the several States, Territories, and possessions of the United States, and the District of Columbia.

(b) The term "blind person" means a person having not more than 10 per centum visual acuity in the better eye with correction. Such blindness shall be certified by a duly licensed ophthalmologist.

(c) The term "State" means a State, Territory, possession, or the District of Columbia.

SEC. 7. There is hereby authorized to be appropriated such sums as may be necessary for carrying out the provisions of this Act.

Approved, June 20, 1936.

APPENDIX II

PUBLIC LAW 565
All 68 Stat. 663

AMENDMENTS TO THE RANDOLPH-SHEPPARD VENDING STAND ACT

Blind persons. Vending stand operation.

SEC. 4. (a) The first section of the Act entitled "An Act to authorize the operation of stands in Federal buildings by blind persons, to enlarge the economic opportunities of the blind, and for other purposes", approved June 20, 1936, as amended (20 U.S.C., sec. 107), is amended to read as follows: "That for the purpose of providing blind persons with remunerative employment, enlarging the economic opportunities of the blind, and stimulating the blind to greater efforts in striving to make themselves self-supporting, blind persons licensed under the provisions of this Act shall be authorized to operate vending stands on any Federal property where such vending stands may be properly and satisfactorily operated by blind persons. In authorizing the operation of vending stands on Federal property, preference shall be given, so far as feasible, to blind persons licensed by a State agency as provided in this Act; and the head of each department or agency in control of the maintenance, operation, and protection of Federal property shall, after consultation with the Secretary, and with the approval of the President, prescribe regulations designed to assure such preference (including assignment of vending machine income to achieve and protect such preference) for such licensed blind persons without unduly inconveniencing such departments and agencies or adversely affecting the interests of the United States."

Concession-stand opportunities.

(b) (1) Section 2 (a) of such Act of June 20, 1936, as amended (20 U.S.C., sec. 107a), is amended by striking out "in Federal and other buildings" where it appears in paragraph (1) and inserting in lieu thereof "on Federal and other property", and by amending paragraph (4) to read as follows:

State licensing agencies.

"(4) Designate as provided in section 3 of this Act the State commission for the blind in each State, or, in any State in which there is no such commission, some other public agency to issue licenses to blind persons who are citizens of the United States and at least twenty-one years of age for the operating of vending stands on Federal and other property in such State for the vending of newspapers, periodicals, confections, tobacco products, articles dispensed automatically or in containers or wrapping in which they are placed before receipt by the vending stand, and such other articles as may be approved for each property by the department or agency in control of the maintenance, operation, and protection thereof and the State licensing agency in accordance with the regulations prescribed pursuant to the first section: Provided, That (A) effective four years after the enactment of the Vocational Rehabilitation Amendments of 1954, in any State

Restrictions.

having an approved plan for vocational rehabilitation pursuant to the Vocational Rehabilitation Act, the licensing agency to be designated hereunder shall be the State agency designated pursuant to section 5 (a) (1) of such Act as the sole State agency with respect to vocational rehabilitation of the blind; and (B) prior to such time, no license shall be granted except upon certification by a vocational rehabilitation agency that the individual is qualified to operate a vending stand."

29 USC 41.

29 USC 35.

(2) Paragraph (5) of such subsection is amended by inserting ", including the issuance of rules and regulations," after "steps".

HEW regulations.

(c) Section 2 (b) of such Act of June 20, 1936, as amended, is amended by striking out the third sentence thereof.

20 USC 107a(b).

(d) Section 2 (c) of such Act of June 20, 1936, as amended, is amended to read as follows:

20 USC 107a(c).

"(c) The State licensing agency designated by the Secretary is authorized, with the approval of the head of the department or agency in control of the maintenance, operation, and protection of the Federal property on which the stand is to be located but subject to regulations prescribed pursuant to the first section, to select a location for such stand and the type of stand to be provided."

Location and type of stand.

(e) Section 3 of such Act of June 20, 1936, as amended (20 U.S.C., sec. 107b), is amended to read as follows:

State licensing agency.

"SEC. 3. A State commission for the blind or other State agency desiring to be designated as the licensing agency shall, with the approval of the chief executive of the State, make application to the Secretary and agree —

Application for designation.

"(1) to cooperate with the Secretary in carrying out the purpose of this Act;

"(2) to provide for each licensed blind person such vending stand equipment, and adequate initial stock of suitable articles to be vended therefrom, as may be necessary: Provided, however, That such equipment and stock may be owned by the licensing agency for use of the blind, or by the blind individual to whom the license is issued: And provided further, That if ownership of such equipment is vested in the blind licensee, (A) the State licensing agency shall retain a first option to repurchase such equipment and (B) in the event such individual dies or for any other reason ceases to be a licensee or transfers to another vending stand, ownership of such equipment shall become vested in the State licensing agency (for transfer to a successor licensee) subject to an obligation on the part of the State licensing agency to pay to such individual (or to his estate) the fair value of his interest therein as later determined in accordance with regulations of the State licensing agency and after opportunity for a fair hearing.

"(3) that if any funds are set aside, or caused to be set aside, from the proceeds of the operation of the vending stands such funds shall be set aside, or caused to be set aside, only to the extent necessary for and may be used only for the purposes of (A) maintenance and replacement of equipment; (B) the purchase of new equipment; (C) management services; and (D) assuring a fair minimum return to operators of vending stands: *Provided, however*, That in no event shall the amount of such funds to be set aside from the proceeds of any vending stand exceed a reasonable amount which shall be determined by the Secretary;

"(4) to make such reports in such form and containing such information as the Secretary may from time to time require and to comply with such provisions as he may from time to time find necessary to assure the correctness and verification of such reports;

"(5) to issue such regulations, consistent with the provisions of this Act, as may be necessary for the operation of this program;

"(6) to provide to any blind licensee dissatisfied with any action arising from the operation or administration of the vending stand program an opportunity for a fair hearing."

(f) Section 6 of such Act of June 20, 1936, as amended (20 U.S.C., sec. 107e), is amended by adding at the end thereof the following new subsections:

"Federal property."

"(d) The term 'Federal property' means any building, land, or other real property owned, leased, or occupied by any department or agency of the United States or any instrumentality wholly owned by the United States, or by any department or agency of the District of Columbia or any Territory or possession of the United States.

"Secretary."

"(e) The term 'Secretary' means the Secretary of Health, Education, and Welfare."

20 USC 107f.

(g) Such Act of June 20, 1936, as amended, is amended by renumbering section 7 as section 8, and by inserting immediately after section 6 the following new section:

State acting as licensing agency before July 1, 1954. Status.

"SEC. 7. In the case of any State which, immediately prior to July 1, 1954, was performing the functions of a State licensing agency pursuant to an application for designation approved under this Act, such application shall be deemed to be an application approved under section 3 of this Act, as amended by the Vocational Rehabilitation Amendments of 1954, until (1) the Secretary finds, after reasonable notice and opportunity for a hearing to the State licensing agency, that the provisions contained in such application have been changed so that it no longer complies with any provisions required to be included in such application under this Act, as in effect prior to July 1, 1954, or that in the administration of the program there is a failure to comply substantially with any such provision, or (2) the application is superseded by an application approved under section 3 of this Act after July 1, 1954, or (3) July 1, 1955, whichever first occurs."

THE 1964 WORLD ASSEMBLY OF THE WORLD COUNCIL FOR THE WELFARE OF THE BLIND

An Interpretation of Its Resolutions
by Berthold Lowenfeld, Ph.D.

> "Our earth is but a small star in the great universe. Yet of it we can make, if we choose, a planet unvexed by war, untroubled by hunger or fear, undivided by senseless distinctions of race, color or theory."
>
> Stephen Vincent Benet

Resolutions drafted and passed at conferences are always good indications of the collective frame of mind of their attendants. This holds particularly true if conferences are policy-setting and action-oriented. In the case of the World Assemblies of the World Council for the Welfare of the Blind both characteristics are relevant. The fact that these Assemblies meet only every five years contributes to make changes more distinctly apparent because half a decade gives them some time to mature and become established.

It would be tempting to compare issues discussed and resolved at the four past World Assemblies (1949, 1954, 1959 and 1964) with each other and with those which dominated the first conference of this kind, the World Conference on Work for the Blind, held in New York City in 1931, thirty-four years ago. Those who, as I, attended that Conference and also the last World Assembly — Mr. George F. Meyer and Mr. Peter Salmon were the only two United States Delegates in 1931 who also took part in the 1964 World Assembly — must have had their minds go back to the early attempts for world-wide understanding and efforts in our field. But the detailed account of the history of these conferences must be left to a historian. Valuable information about the preceding conferences and the personalities involved was given by M. Robert Barnett in BLINDNESS 1964.[1] This review will only attempt to bring into focus the issues which emerged as dominant at the 1964 Assembly, particularly as distilled in its resolutions, with some reflection on past Assemblies and their issues.

International Welfare

Concern for the welfare of the blind in various parts of the world is the issue which has occupied all past Assemblies and also that of 1964. There are, however, distinct differences to be noted in the 1964 Assembly resolutions. First, the resolutions call for "planning and implementation of activities relating to rehabilitation of the blind within the co-ordinated program for the handicapped," in the hope that the United Nations and its Specialized Agencies will support programs in all countries designed "to bring greater opportunities for the handicapped, including the blind."

This appears to indicate a relinquishment of the "go-it-alone" philosophy and practice which in the past prevailed in many countries. It brings work for the blind internationally into the broader program for all the handicapped. At the same time, the resolutions recommend "the development of well-conceived regional programs within the accepted geographical areas of the world." They refer specifically to the Asian Plan for the Blind, to a Latin-American Plan for the Blind in Central and South American countries as a part of the Alliance for Progress, and to an African Plan. Actually, only the Asian Plan has been developed in detail and was unanimously adopted by the Second Asian Conference on Work for the Blind in 1963 held in Kuala Lumpur, Malaysia.

The resolution of the World Assembly calls on the United Nations and its Specialized Agencies to give advisory and supportive services to all governments requesting such assistance toward the early achievement of the goals outlined in the Asian Plan for the Blind. Obviously, the Assembly was hopeful that similar plans will be developed for the blind living in emergent countries of other continents. All these plans should be designed to include "prevention of preventable blindness; relief of the distresses of poverty among the blind; provision for their education, orientation and rehabilitation; opening up of channels for remunerative employment; and instituting programs for the special care of the aged blind." Thus, plans for the welfare of the blind, as summarized in the first three resolutions of the 1964 Assembly are conceived as integrated, regional and specific.

There is one group whose interests and needs are singled out as cutting across regional differences in all countries having a predominantly rural economy — the rural blind. John Wilson of the Royal Commonwealth Society for the Blind, one of their eloquent protagonists, has estimated them as about 70 per cent of the world's blind population,[2] now believed to be 14 million. Most of the rural blind live in the emergent countries of Asia, Africa, and Latin America that have a predominantly rural economy. The resolution dealing with the rural blind summarizes their most urgent needs as follows: (1) land for the landless blind and funds for their resettlement; (2) model agricultural rehabilitation projects and at least one well-planned center for training in agriculture and allied pursuits in each country; (3) where possible, training to be integrated in the normal rural training institutions; (4) training programs for blind women in homemaking and agriculture. These are common needs of the rural blind everywhere. The World Assembly was urgently and acutely aware of the need for action in this field for which it appealed to the United Nations as well as to all governmental and private agencies. This is indicative of the role which concern for blind people in the emergent countries has assumed at the international level in our field. At the World Conference in 1931, the rural blind were not even mentioned.

The same must be said about the International Conference of Workers for the Blind in 1949, the Oxford Conference, the resume of which enumerates and discusses only the following areas of employment: workshops, manual and other occupations at home, factories, clerical work, commercial representatives, professions, other occupations, without even mentioning rural employment. This should not be surprising since, with the exception of Algeria, no representatives of African, Asian, or Latin American countries were present at this Conference. In 1954, Sir Clutha Mackenzie forcefully called the attention of the World Assembly to the special needs of the rural blind and, apparently as a result of this the 1959 Assembly devoted one of its sessions to Rural Employment in the Emergent Countries, and passed a resolution dealing with their needs, still rather general in character. The 1964 Assembly already could refer to the Asian Plan as a specific and detailed example.

Integration

Integration of the blind into the community as a basic tenet in work for the blind was for the first time proclaimed in the 1964 Assembly which demanded in a special resolution dealing with Integration of the Blind into the Community that "the objective of all public and private programs for the blind should be, insofar as possible, to integrate blind persons into the normal life of the community." Many speakers at past Assemblies have advocated integration in some special areas, for instance into normal productive activities, into normal community life, or into normal educational facilities.

The 1964 resolution, however, is the first one which proclaims integration as the general goal and is specific in dealing with means of its achievement. It seeks integration as a result of fully-developed abilities of every blind person through orientation, rehabilitation and general education, realizing the best that is in each individual. It recognizes that "the overwhelming need is to find competitive employment opportunities in public services and in the industrial, agricultural and workaday world for the vast majority of blind people during their productive years of life," and that the blind must be informed about facilities and opportunities for them. The resolution recognizes that the sighted world needs information about blindness, and that the blind person's family needs to understand the problems of blindness. This stress on understanding which cannot be achieved by temporary campaigns but by a steadily maintained program, is in line with the results of some research studies which show that parental understanding correlates significantly with good adjustment of the child.3/

The 1954 Assembly has passed a resolution recommending the compilation of "a catalogue of films, posters and pamphlets designed to arouse interest in the prevention of blindness and welfare of the blind . . .", all measures which are temporary in character. Compared to this the 1964 resolution means a great step forward since it recognizes that "understanding the problems of blindness" is a prerequisite for "enabling blind people to take their rightful place in the family, in employment, and in the community as normal and accepted persons."

Significant In What It Omits

Another facet of integration is brought out in the resolution dealing with The Blind With Other Disabilities. It recommends that "the rehabilitation and training of blind persons with other disabilities should be undertaken at regular centers serving blind persons without additional disabilities," and that "self-reliance and independence and full utilization of the residual potential of the individual should be the aim to enable multiple-handicapped blind persons to take their part in the life of the community." Thus, the blind person with other disabilities should be integrated for training purposes with the blind so that in the end he may be able to integrate into the life of his community.

The resolution dealing with the aged blind is more significant in what it omits than in what it recommends. It recommends for this increasing population sector of blind persons provisions to meet "their needs for adequate food, shelter, medical attention, recreation and companionship," but it does not mention homes for the aged blind which were sought out as solutions in the past. It must be inferred that the Assembly looked with favor upon the integration of the aged blind into the aged population and into services provided for them as a whole.

A resolution in two parts which is essentially segregative was the only one which found the delegates still split in their opinion, as they probably always will be. Recognizing that the blind continue to be discriminated against in employment opportunities, to a greater or lesser extent in all countries of the world, it was recommended that "member nations be urged to improve the vocational training of blind persons at special centers and in qualified courses." This part of the resolution was adopted though it runs contrary to efforts of integrating blind people in generally available training facilities. Apparently, most members felt that special centers and qualified courses are for many blind people the only effective way of rehabilitation. And, indeed, special rehabilitation centers for the blind which can offer a total program geared to the needs of blind persons have been so far the most successful means for their rehabilitation and subsequent personal integration into the community.

The second part of the resolution in which member nations were urged "to adopt legal measures making compulsory the employment of blind persons in occupations in which they can successfully compete with sighted persons," brought up a controversial question which has been raised at every international meeting for many years and on which the delegates still disagreed. Countries having specific laws concerning their quota system for the employment of the blind naturally favored the extension of these laws internationally. The United States, along with much of Western Europe, is in opposition to this and agrees that employment should be based primarily on individual qualifications and that any quota system eventually militates against the severely disabled.

Question of Blind Delegates

In a time which is characterized by the integration of the blind into society, it is only natural that the blind themselves will want to play an increasing role in the organization which to a certain extent shapes their destiny and represents them before the world. The World Council for the Welfare of the Blind has always held the view that qualified blind persons, including representatives of organizations of the blind, should be given maximum opportunity for services on national delegations. In fact, it has consistently been true that well in excess of fifty per cent of all its members have been blind themselves. After some debate, the Assembly adopted a constitutional amendment and a resolution dealing with this topic. The amendment which was prepared and recommended by the Executive Committee of the World Council has the following text: "Where in any country there exists a substantial group of blind persons organized into associations and where there are blind persons occupying leading positions in agencies for the blind, adequate provision should be made for their representation in the national delegation."

The resolution recognizes "that those who experience blindness are likely to understand its problems and to be able to suggest methods of overcoming them," and that organizations of the blind are in many nations making "a significant contribution to the well-being of their members and to the improvement of programs for the blind." It concludes: "Accordingly, the World Council for the Welfare of the Blind adopts a policy of encouraging the development of independent organizations of the blind."

Informing the World about the Blind

There were some resolutions which indicated that the Assembly was in serious search for means to develop better understanding of blind people throughout the world. It believes that this can be achieved through "wider and more effective dissemination of information directly and indirectly concerning the welfare of blind people." It recognizes "the possibilities of a global approach to this important matter," and "agrees to organize a program of public information throughout the world during one week of each year," to be known as "World Blind Welfare Week." This resolution should be of special interest to social psychologists and those engaged in research on attitudes. All interested in various fields of disabilities and the disabled themselves are trying in different ways to influence public attitudes. Do we have any large-scale studies which would answer the question of whether there is any common core of attitudes toward exceptionality? An excellent start has been made in the study by Dembo, Lebiton and Wright.4/ Also, Beatrice A. Wright in her book Physical Disability — A Psychological Approach5/ has given this problem some searching thoughts. At present each group tries to influence the public on its own while a total effort supported by all groups and aimed at what may have been found to be the common core of attitudes could have much greater effect. Information is certainly important, but it must be presented in such a way that it will have an optimal result, and this is why sociologists and psychologists should be called in at an early stage of the planning.

Those concerned with the welfare and rehabilitation of the deaf-blind asked, through a resolution of the Assembly, that Pope Paul VI who has expressed deep concern and compassion for deaf-blind persons and their problems issue a pronouncement "to the people of the world, and especially to those concerned with humanitarian works, for their help, for their sympathy and compassion, and for their support of works in the interests of deaf-blind persons everywhere," in order to "provide services to bring these deaf-blind back into the warm stream of humanity."

No doubt such an intercession, singular as it would be, could have a profound influence throughout the world. In a similar vein the Assembly asked the General Assembly of the United Nations to proclaim, in addition to its Universal Declaration of Human Rights and to its Declaration of the Rights of the Child, a Declaration of the Rights of Disabled Persons.

Changes Take Time, Occur Slowly

All these efforts show that the members of the Assembly felt deeply committed to pursue all avenues which might help to improve the concept the public holds of the blind, its attitudes toward them, and its understanding of their problems. This commitment is, after so many years of efforts, undoubtedly mixed with some impatience.

This, however, appears to be not justified since one must keep in mind that changes of this kind take time and occur rather slowly. Peace has been held before humanity as an ideal to be achieved for thousands of years and how far are we still from seeing it become a reality! This is not said in a spirit of defeatism but rather as a plea for continued efforts in which this Assembly certainly has not been found wanting.

Besides these endeavors to spread information externally, the Assembly also sought ways to improve information within the field and to exchange experiences gathered in various parts of the world. It instructed the Executive Committee to obtain financial support "whereby leaders in the fields of blind welfare and the prevention of blindness from developing countries may visit developed countries and in turn, be visited by experts from such developed countries." In this way it is foreseen that knowledge of the problems in the developing countries may be better assessed and remedies on a practical basis evolved. It also was recommended that a pool of experts in various fields should be established by the World Council for the Welfare of the Blind from which member countries can draw for their development programs. Finally, this resolution established an Information Bureau at the official headquarters of the World Council for the Welfare of the Blind "for purposes of disseminating information to member countries, organizations for the blind, and individuals concerning matters relating to blind welfare."

This internal information resolution was undoubtedly motivated by the experience of the members that a quinquennial assembly, even of twelve days duration, does not permit an effective exchange of experiences and information in sufficient depth, though it does provide an opportunity for formulating guidelines, pronouncing consent on principles, and for becoming personally acquainted. This special resolution wants to provide the foundation for a thorough dissemination of knowledge in our field which must be supplemented by already available publication channels and ultimately by personal visits of experts and by a special information center.

Economic Security

As in all previous World Assemblies, economic security for the blind was an extensively discussed topic. The discussions centered on two ways in which a blind person can secure his and his family's economic security — by employment or by financial assistance.

The resolution dealing with employment opportunities was rather nonspecific. This may be due to the fact that all specific issues had been discussed in detail at previous World Assemblies. Apparently, little new could have been added to it at this Assembly. It was asked that training centers, scholarships for pupils and students, institution of loans of honor for equipment, and for the establishment of craftsmen, shopkeepers, professional workers be instituted and that "opportunities of remunerative jobs of all sorts" should be secured for the Blind. Those "who cannot achieve a normal output" should be placed in sheltered workshops and granted "a remuneration at least equal to that of a sighted worker of the same category, as well as the consideration deserved for their efforts."

Finally, the resolution recommends a systematic search for new activities in which the blind can engage and that some activities which have been found successful in some countries, such as physiotherapy, be seriously considered everywhere else.

Most Positive Recommendation by VRA

These recommendations are rather general and reiterative and lead one to believe that many of the Assembly delegates did not feel that new job opportunities can easily be found but that progress can be expected by intensified efforts along established lines of job placement, supported by a campaign to improve employer attitudes.

Undoubtedly, the most positive contribution in this area came from the Vocational Rehabilitation Administration of the United States whose representatives, Commissioner Mary E. Switzer and Louis E. Rives, Jr., put before the Assembly a description of practices in this field in the United States. Many delegates felt that provisions of this comprehensiveness and depth can only be made in a country as large and prosperous as the United States at this time, but all of them found some phases of it applicable to their specific conditions.

Although no resolution dealt with mobility training, this topic, particularly the use of the long-cane technique, was discussed by many delegates, particularly by those who were blind themselves. It was quite apparent that most of the blind delegates either had achieved a high degree of independent mobility already or were confident that they could gain it. The present status in this so all important area is certainly vastly different from that prevailing at the World Conference on Work for the Blind in 1931 when one highly-respected delegate could state that in getting about "the assistance of another person is required at all times and in all places."

Needs Freedom of Management

The Assembly was much more specific in its resolution dealing with financial assistance to blind persons in need of it. It proclaimed in its preamble to the general principles that "programs of financial assistance should be addressed to the over-all objectives of dignity, of economic independence and social interdependence as well as of meeting the elementary needs of subsistence and health . . . commensurate with the habits of life and the social and economic patterns of the community."

In the implementation of these objectives it is recommended that financial assistance be sufficient to cover the needs common to all humans and those common to the blind by specified minimum amounts determined as group needs; and those needs which are special to the individual by individually determined amounts of financial assistance. In order to foster a spirit of self-reliance and independence, the blind person should have "freedom in the management of his own affairs including living arrangements, choice of consumption items, occupational objectives and leisure-time activities." The resolution recommends that conditions of eligibility for, as well as administration of financial aid, should be clearly specified in the law "so that administrators, social workers and recipients may know their rights, duties, and relationships."

By financial assistance, "blind persons should be helped out of distress and not merely in it." Therefore, "pauperization should not be a condition of the grant." Also, eligible persons should be encouraged in the process of gaining self-support through rehabilitation by being allowed to retain resources and income needed for it. As an incentive toward rehabilitation and employment, the recipient should be permitted to retain some of the rewards of his efforts. The resolution takes a stand against "the use of compulsion, reduction of the grant, or increasing hardships."

The final part of the resolution stresses that "blindness is a distinct disability, different in its nature and its social consequences from other physical disabilities, from old age, or from the condition of dependent children. Just as the substantive provisions of the financial aid plan should take account of this fact, so should the administration. To the extent feasible, persons should be employed to carry out the plan who are knowledgeable about the special problems of the blind."

The claim for the dignity of the individual pervades all parts of this resolution. It takes into account that the blind person is in this category not by his own choice but by circumstances beyond his control and that society has an obligation to assist him in becoming as independent as his seeing equal would be either through employment and its financial returns or through financial assistance justly determined and humanely conferred.

Prevention

Ever since conferences in work for the blind were held, either national or international in scope, they have concerned themselves with prevention of blindness for those who would otherwise join the ranks of the blind, and with braille as a system of reading and written communication for those who are already blind. At this Assembly a resolution was passed which recommends intensification of efforts to prevent blindness calling special attention to areas where trachoma and river-blindness are major problems, and also to the necessity for famine control and improved food production and distribution as a means of preventing blindness, particularly among young children. Cooperation of the World Council for the Welfare of the Blind with the International Association for the Prevention of Blindness is urged in order to combine efforts in such areas as training of eye specialists, investigation of the extent and causes of blindness, and promotion of prevention of blindness measures, voluntary and through legal provisions.

Braille

The Assembly acknowledged progress made in the realization of a universal braille system but encouraged further work, by a committee of experts, in the area of a universally accepted system of World Braille Music Notation for Western Music. Similarly, it wants a committee appointed to examine the question of a unified world-wide Braille Mathematics Notation. Also in the field of braille, the Assembly asked that the World Braille Council give consideration to the problems of the availability and use of braille in the emergent countries where the problems of multilingual patterns, of the reading or non-reading habits of the adult population, and of the high cost of facilities for the production of braille are major obstacles.

The special communication problem of the deaf-blind which "frequently prevents the recognition of the needs and potentialities of deaf-blind persons," led to the recommendation that curricula of training for Home Teachers and other workers concerned in the serving of blind individuals include orientation to the problems of the deaf-blind and training in the use of the Manual Alphabet as a required course.

Confident, Optimistic Approach

The resolutions of the 1964 Assembly reflect to some extent the presentations of the speakers at the various meetings, supplemented by the thoughts expressed in the discussions. All in all it can be said that this Assembly and its resolutions were confident — optimistic in their approach to problems presented. The status which was so aptly characterized by Helen Keller's words "while they were saying among themselves 'it can not be done' it was done" appeared to have given way to an approach which asks "how can it best be done?" This search pervaded the Assembly coupled with the serious feeling of responsibility to assist the emergent countries throughout the world in improving the conditions of their blind fellow citizens. The Assembly felt itself being a part of the world-wide efforts of the United Nations and its agencies, to bring to mankind peace, economic security, health and education in an atmosphere in which human dignity is respected and creativity of the individual encouraged. This high level of aspirations was sustained throughout the Conference and found expression in the resolutions which will guide the efforts of the World Council for the Welfare of the Blind under its new President, Mr. Eric T. Boulter, for the next half decade.

FOOTNOTES

1. Barnett, M. Robert. "Global Progress — Advent of a World Organization," in Blindness 1964, Washington, D. C.: American Association of Workers for the Blind, 1964, 143-149.

2. Wilson, John. "Blind Children in Rural Communities," The New Outlook for the Blind, October 1957, 351-356.

3. Cowen, E. L., Underberg, R. P., Verillo, R. T., and Benham, F. G. Adjustment to Visual Disability in Adolescence. New York: American Foundation for the Blind, 1961.

4. Dembo, T., Leviton, G. L., and Wright, B. A. "Adjustment to Misfortune — A Problem of Social-Psychological Rehabilitation," Artificial Limbs, Autumn 1956, 4-62.

5. Wright, B. A. Physical Disability — A Psychological Approach, New York: Harper & Brothers, 1960.

THE REHABILITATION CENTER MOVEMENT FOR BLIND PERSONS IN THE UNITED STATES

Part One — Ideal or Specter?
Part Two — A Leader Speaks.
Part Three — Historical Growth.

THE "BLIND CENTER": IDEAL OR SPECTER?

By C. Warren Bledsoe

Perhaps the most influential opinion ever written about the self-management of adult blind people was that of Samuel Gridley Howe.... in the 1849 Report of the Perkins School for the Blind. Stating a policy against workers living in workshops at which they worked, he put on record in vivid language some deep thoughts about dependency problems ensuing from the handicap of blindness.

In 1908, at a convention of the American Association of Workers for the Blind this classic was cited during a soul-searching discussion entitled "Boarding in an Institution vs. Boarding Outside," and the entire text was reprinted in the next issue of "The Outlook for the Blind."

Again in 1947 when talk of founding centers for rehabilitation of the blind reached the ears of Dr. Robert B. Irwin of the American Foundation for the Blind, he caused a second printing of this document, somewhat deleted for the impatient, modern reader, but with its essential meaning unimpaired.

Sometimes "Charitable Tyranny"

Its quintessence continues to carry sober considerations for anyone embarking on a kindly sociological adventure to include living-in arrangements for adult blind people.... whether the program plans long-term or short-term residence, and whether it is christened with educational, medical, sociological, or merely human terms.

Howe's basic creed was set forth in a paragraph in which he said:

> "It is a common error in the administration of public charitable institutions to treat the inmates like children, though they be adults, and to govern them too much.... The inmates, therefore, are sometimes victims of a charitable tyranny, and are subjected to an absolute despotism of benevolence. They must do everything in a particular way, and according to the pleasure of their governors for the time being, who with well-meant but ill-judged officiousness, wish to do even their thinking for them. They must lie down, get up, sit, stand, march, eat and drink by rule and measure. Even their devotions are of a prescribed form, and their communion with their Maker must be at times and in words gravely decided upon by the committee; they must say grace over viands, though they may happen to be un-unsavory to them, and return thanks for a bountiful repast, though they may not feel half filled. The consequences of all this is apt to be a clannish spirit, a defiant disposition, restlessness and discontent. The seeds of charity do not bring forth the harvest of gratitude and the fault is often attributed to the ungrateful hearts in which they were sown, whereas perhaps it is partly because they were not planted with discerning love.

> "I do most earnestly hope that we may not lessen the happiness of the blind in this way: but that, in enlarging our work department and putting it upon a permanent basis, we may adopt the system which will give them the greatest possible personal independence that is consistent with their true interests. This will be most conformable to the genius of our country and our times...."

Later he mentioned "that peculiar and indescribable spirit, which may be called the 'asylum' spirit.'

And most tellingly in his argument against the work home, he wrote:

> "It would be easy to point out many disadvantages and discomforts to the blind, which would arise if they lived in one house; but let a single one suffice.... The very economy which dictates the boarding in common by day would suggest their being herded together by night.... The considerations and reasons in favor of giving to every one of the workmen and workwomen a separate sleeping room, be it ever so small — a place which they may call their own, to which they can retire and feel that they are at home, are so obvious and strong that they need not be alluded to. The cultivation of the sense of decency and self-respect is alone sufficient to decide the matter, to say nothing of the comfort and enjoyment which the blind would feel...."

Binding all together, was the statement: "It should be the cardinal rule in the education of the blind to keep ever in view that they are to become members of general society, and not of a society of blind persons. Such societies have a tendency to increase in the individual members some of the evils and disadvantages growing out of their infirmity....

....Possessing the great instrument of human intercourse, speech, they seek to commune....their affections and their sympathies are all more deep and active....their companionship should be with those whom it is most desirable for them to know and love."

Becomes Symbol of Blindness

When Dr. Irwin became concerned about talk of "blind centers," centers for adjustment or rehabilitation of the blind, and other projects containing the term center, the word was new as applied to programs for the blind.

But a sociological fact immediately suggested by the word was a notorious problem for blind people. This was the centripetal force which in maturing societies gathers a few blind people in a particular place for the improvement of their lot. This force then acquires a piece of architecture which becomes a symbol of blindness in the minds of the community. It has an appealing name. (Julia Ward Howe herself maintained to the end of her life "Asylum is a beautiful word.") It draws more and more blind people, hired help and money to itself. It is sub-or-supra-cultural, and in the backwaters of human experience, but no one can put a stop to it, however unhealthy it may be.

Whether justly or unjustly, the ancient Quinze Vingts in France has been so regarded, having mustered a unique consensus of disapproval in successive

French governments, and having effectively defied efforts to change its ways by Bourbons, Revolutions, both Napoleons, the Restoration, the commune and a few Republics. It dates from a time when, according to Henry Adams, Chartres Cathedral was built by the dynamic force of the Queen of Heaven. And it was established under Louis IX, that indispensable element in every monarchy: one king every thousand years who is a little above the average and can be made out a moral genius. He organized his Quinze Vingts around the idea of the blind crusader-knight. Its first leader was blind. The members wore the lily of France. They were married men, free to come and go, and their profession was running a great house of prayer in an age of faith. Anyone perusing Adams' Mt. San Michel and Chartres will hardly doubt that within the 13th Century Louis IX's Quinze Vingts may well have been not merely seemly, but a healthy, human thing. Such, also, in more or less degree, have been many other ventures on behalf of blind people. But for those who bother to look into history a little, it is the second to the tenth hundred years that cast a specter.

History Provided Warnings

With the Quinze Vingts and other lamentable, if less clear-cut, examples in the back of their minds, certain workers for the blind who were young early in this century looked on with misgivings during the 1940's when there began to be a push for "centers." They believed the question was not whether an effective center could be started by first generation enthusiasts, but whether it was a rule of social science that the center would inevitably put its life above all other considerations and keep blind people nestling forever on an irresistible bosom. Howe's cardinal principle of making blind persons a part of general society, rather than a special blind society implies a center must function both centrifugally and centripetally. It is the centrifugal action which is most difficult and most neglected as time goes on.

If some of the centers which have come into being during the last 20 years are successful, it is in part due to the reading of dire history and warnings on this problem—warnings which can never be treated lightly without bad consequences. Enthusiasts are never happy to learn that their ideas are not new. People in our time who champion centers will, therefore, be reluctant to see a connection between their brain children and resources to help blind people mustered in other places and other times: A Rumanian village for the blind early in the 20th Century; an 8th Century Japanese band of blind noblemen, surrounding a blind prince; an Italian monastery in the Renaissance. We could multiply such phenomena in which the controlling element was first the fact of blindness toward which efforts at counter-control were intended. Whether blindness or efforts counter to it win out in the end should be the factor determining whether a center lives or dies. This is a corollary of Howe's cardinal rule of dispersing blind people in the general society, but all too seldom is it applied.

If we ask why in the face of so many discouragements people try to help blind people by gathering them together in one place, the answer is that seldom have more than a few individuals been helped any other way. Moreover, in the history of aid to the blind there appear to have been at least a few authentic ideals which we can identify in a past worth remembering.

On May 13, 1909, one of the great neurologists of his day, Sir James Crichton-Browne, delivered an address reflecting his long and close observation of blind students of a great teacher of the blind, Francis Campbell, founder of the Royal Normal College for the Blind.

Concerning the "method" of Campbell at this "center" Sir James said: "Guided not by anatomical knowledge of the brain — for he anticipated that — but by deep introspection, keen observation, and quick sympathy, he has learned that, in order to effectually help the blind, you must attack their crippled visual center on all sides. His life has been spent in discovering new pathways of approach and admission to it, and in making fresh encroachments on it. He has linked it with all the motor centers, in manual and technical exercises, in games, in athletics, and he has enlisted the other senses in its service, and mainly the great sense of hearing, the center for which in the brain lies in the immediate juxtaposition to the center for vision. Of course all instructors of the blind have had to depend mainly on hearing for access to their minds, but Dr. Campbell has made use of that sense in unique ways, and has employed music as a physical stimulant and expander to a degree and with a perfection that no one before him has attempted and that no one after him can excel. To converse with the musical pupils or to study the letters of those who have passed through the college course and gone forth to work musically in the world is to discover an unexpected serenity of spirit.... the untrained blind do not exhibit the same placid mood in anything like the same degree...."

Later a little ominously, though with almost equal reverence, Dr. Edward E. Allen wrote: "One man's genius at work with selected material, in the fittest environment, without benefit of appeasement is my diagnosis."

One man's genius: That poses the question. Is that the formula? What happens when the genius is gone?

It happens that there is alive and articulate one individual who, though he never regards himself as a genius of any kind, was regarded as the genius of a center by many, many people who came in contact with him. This is Russell Williams, first chief of the Center for the Rehabilitation of blinded veterans at the U.S. Veterans Hospital, Hines, Illinois. For 15 years, he personally supervised the basic rehabilitation of many hundreds of blinded service men, including several hundred men blinded in the Korean conflict. Fortunately, he has agreed to answer in plain language some of the hard questions about how centers should function, and how they function in fact.

Thereby, this issue of the Annual gives its day in court to that illusive personal element of which we hear so much.

HOW A CENTER CAN BE RUN FOR THE REHABILITATION OF BLIND PEOPLE

An interview given by Russell C. Williams

QUESTION 1 If you decide to have a center, what are the essentials without which you simply cannot operate?

ANSWER First of all, you can't operate without a belief that blind people can achieve a respectable way of life. Somebody in a position of authority has to have this belief, and he must have a lot of time for relationships with individual staff people. A situation must be achieved in which he can control the intrusion of factors which would affect, adversely, the aims of the center.

QUESTION 2 Is there an elusive factor known as personality, the irreplaceable element, which, when it is gone, leaves the center a negative, or even a morbid, social entity?

ANSWER This is very difficult to talk about, but I am sure this is a factor. I don't know the make-up involved in this factor, but for a certainty one element is a strong belief on the part of a pivot-person in what he is doing. This strong belief on the part of the leader, whoever he may be, is a great comfort to the staff that surrounds him. He means business. He has no doubt that his approach to the problem is correct. Others on the staff who have doubts may feel somewhat apologetic for their work at times, may feel that what they are attempting to do is really not worthwhile and that what they are accomplishing is not much. So long, however, as the person in the pivot-leadership position believes in what he is doing, and so long as his feeling dominates the place, others just don't have to apologize or feel that what they are achieving amounts to little. I think this is where the worms really get into the wood in the center.... a softness of belief, a kind of superficiality that creeps into the expressions of faith in what the center is doing. Belief doesn't have to be expressed in words so often, but it has to be expressed in actions.... consistency of actions. I think history will show that there is this element involved in centers, and sometimes it isn't recognized for what it is until it is gone.

QUESTION 3 Are there principles for running centers which do not depend on anything mysterious in personality, but can be applied by anyone intelligent enough to grasp them, once they are stated? If so, what are these principles?

ANSWER There certainly are: the real meaning of a success pattern in activities that are tried; the kind of observations which tell when success is really being achieved; the subordination of certain basic needs on the part of the staff in favor of the satisfaction of needs on the part of a client who after all, is the one struggling for growth; the real principles behind sensitive observation or evaluation of a person; the gradation of activity so that there is enough to be challenging and satisfying when achieved but not so much as to bring about the negative effects resulting from failure.

QUESTION 4 Is an environment of missionary zeal desirable?

ANSWER I don't know how to answer this because I don't quite know all the meanings of "missionary zeal"; but I do say that from the standpoint that I view missionary zeal, yes — it is desirable. And this means a right sincere devotion to the task at hand, a devotion that takes into account the realistic aspects of life, and gives some understanding of other aspects of life. The reason I say this is that sometimes missionary zeal means that people are pressing very hard for development of a certain kind, but have an unreasonable view of the circumstances which make their missionary task necessary. This could be the Protestant missionary in Africa who would spend a considerable portion of his time speaking against the Muslims or against the Catholic Church, and this, to me, would be a very narrow missionary operation. Now, then, if missionary zeal means to get right down to the task at hand of helping the blind person to understand what it is that's going to be different about meeting life now that he can no longer see, and setting about learning how to do things; acquiring the special type of thinking that goes with this; understanding just what society is like under the conditions of blindness and the emotional responses he'll get and give — all of these things he needs to know and become conditioned to — then missionary zeal is desirable.

QUESTION 5 What do you think of the term "blind center"?

ANSWER Well, within the past two years I changed the name of the Blind Center at Hines to the Rehabilitation Center for Visually Impaired and Blinded Veterans. This was out of respect for the sensitivity that people who can still see feel over being defined as blind. The change was an expedient in two senses: (1) I wanted people who have sight, but who are defined as as blind (because we have to classify people in terms of programs) — I wanted these people to come to the program and receive services from which they could benefit. (2) I believed that this change would make it easier after a period for them to classify themselves as blind for certain purposes. I'm not very fussy about whether you call it a rehabilitation center for the blind or a blind center: I don't mind either of those terms. I can't think what else you might call it and use the term blind and I think the term blind should be used. To me blindness isn't an ugly word at all, and it seems to me that the people who think it is have very little faith in the ability of blind people to meet the conditions of life with all the resources at their disposal. If we're striving for some efficiency in the use of terms, "blind center" seems very easy and useful, and much more manageable than "rehabilitation center for the blind," or "rehabilitation center for visually impaired people," and that sort of thing. I can't really involve myself very seriously in arguments over whether a center or a school can be "blind" in fact. This seems to me a classic time-waster around meetings and conventions. To attempt to get at the question from another standpoint, objections may be raised to the term, "center," itself. If you don't believe in them, calling centers by another name won't help. In any case, what I mean by a blind center is an area set aside for a particular purpose, as is a technical school or place of business. In this case, the location, buildings and equipment are there so that people can meet and pass along information about how to deal with blindness. Call it what you will, but do not complicate something which is already complicated enough: blindness.

QUESTION 6 What words do you need to run a center?

ANSWER The simplest words you can find to describe the reorganization that takes place there. To me this is similar to a basic training period in the Army, or "boot camp" in the Navy — but this is just because the center I have been associated with has had to do with servicemen. All centers develop their own jargon. But of one thing you can be sure — all clients hate pretentious talk about what is done for them and there is no place for intellectual snobbery.

QUESTION 7 Should a center undertake actively to make better men and women of clients?

ANSWER I think I know what is meant here: is it a major objective to make a saint out of a sinner? Well that is not the major objective of a blind center. The major objective is to take saints and sinners and help them to perform without sight. If the sinners become saints during the process — that's a kind of bonus! I think this is all right. But it is certainly a very minor objective of a blind center.

QUESTION 8 Should the center advance the client's education?

ANSWER No. And what I feel we mean here is: do we teach better English? Do we teach creative writing? Do we teach arithmetic? No. What goes on in a center is the learning of the means by which a person can then go ahead and acquire a higher level of education if he wishes — either academic, technical or vocational. Any improvement in education is a sort of by-product of the effort to get basic skills. For instance, a certain amount of actual educational development may take place while one is learning communication skills.

A kind of improvement of technical or vocational skill might accrue while one is developing manual skills. One might even learn something about geography while developing mobility skills. But these are not major objectives and are really by-products of the basic learning process that is going on.

QUESTION 9 What ought a center do for blind clients?

ANSWER We had a meeting here in Washington in 1960, following the 1956 seminar in New Orleans, to spell this out, but both groups were painfully unable to do it. A center should provide the opportunity for a blind client to learn. There is a striking difference between teaching the client and giving him the opportunity to learn, setting up the special circumstances which are necessary for him to acquire what he needs in order to live under the conditions of blindness. A center should offer him an opportunity to come to terms with life under blindness.

I'm thinking at this time of a center being an establishment for adult blind persons who are beyond the elementary and secondary school years. Being without the ability to see has made necessary that they meet life in ways other than those of the people around them. The center sets up and maintains conditions under which these things can be comfortably learned, where the basis for self-respect is built up as people learn, where the whole environment tends to help in the formation of the attitudes and the emotional framework that is needed for adapting to the changed methods that become necessary when one can't see but must go about doing things in life and meeting people and associating with them none-the-less.

Conditions surround the client where the exposure of shortcomings is in no way humiliating. This means the establishment of conditions for learning in such a way that the client can really believe that what has occurred is that he has learned, and he does not dwell on the fact that the staff has taught him. This means that the staff has to subordinate the something in them that needs to say, "I have taught." This has to be submerged so that the client can actually feel that what has occurred is that something new has come to mind and he has learned it. For example there must exist an easy willingness on the part of the staff to call a client "Mr.", at the beginning; then, as friendship develops the time comes for the use of first names. This courtesy provides the framework in which the client can begin to feel self-respect. The staff never solicits "Thank you" but gets a good deal of satisfaction from any expression of real appreciation on the part of the clients. The staff must cultivate the kind of sensitivity that can wait for expressions of gratitude that are almost unexpressed. It gets its satisfaction from seeing the client gain in his own ability to perform — knowing that it has been part of this growth process. What I am saying here is involved with Mr. Willi Ebeling's classic formula for the dog guide trainer: "a controlled desire to get things done." This "controlled desire to get things done" is something which should really be a part of a number of staff conferences, especially the controlling of the desire to get some expression of gratitude from a client. This restraint is particularly applicable during the early phases of the relationship of staff and clients. As time goes on the staff can, and should, slowly shift its attitude with the objective of emotional conditioning for leaving the center. Following this the relationship pretty much terminates, except perhaps on the basis of a friendship that is an equal-giving, equal-receiving relationship, which inevitably extends in some instances beyond the time when the client leaves the center.

QUESTION 10 Couldn't services be taken to a client in his native habitat?

ANSWER They can be taken to him, yes. But I seriously question whether such a system could achieve, in even a remotely reasonable span of time, what a well-operated center can accomplish. This is because of the embarrassment occasioned by presentation of oneself in an inferior position before peers in the family and the community. Family involvement can also be a problem in a center, but it is many times more difficult in the client's own home and neighborhood. The classic by-stander, moreover, who always thinks the instructor is "mean" when he offers a challenge to the pupil is next to murderous when a member of his own family is the victim, or, once he gets a little sophistication, more demanding than any instructor would ever dream of being. The emotional load is greatly reduced away from all this.

QUESTION 11 Are there some individuals who should be kept away from the best center one could imagine?

ANSWER There are people who learn things that serve them in good stead, even though exposed to very little formalized education. Lincoln, for example, without the benefits of a university education, became quite a person, as he demonstrated during his Presidency, and yet no center of education or learning was available to him. So let us say there certainly are people who could get along without blind centers, and many have, of course. It's an academic question whether they have moved faster alone than they would have with the kind of help a center can give. But as a general rule, it was rather clearly demonstrated in the Veterans Administration post-war study of blinded veterans that each of the centers paid off in rehabilitation results.

QUESTION 12 How do you create an environment which does people good?

ANSWER To say that I know anything about this is presumptuous and I think for anyone else to say he knows anything about it is presumptuous. But in programming for a center or a school one does have to presume that he knows something about it, and go ahead as if he felt he did know. There are certain guiding standards in the world and these can apply. I would never bring into an environment of this kind any staff person who would give any demonstration of a lack of respect for law. I wouldn't bring into the environment somebody who couldn't observe such things as the golden rule. I just think there are certain basic guiding factors which are written down and which are followed by people who have respect for other people. These are not the people who seem to live to depreciate other people and seem to get satisfaction from it. There are certainly enough people around who seem to derive a good deal of pleasure out of seeing the growth and development of others. These I would always want, the kind who would believe that when anyone grows, everyone grows, the opposite of John Donne who said, "Any man's death diminishes me." The formula is rather simple: someone who really gets a sincere pleasure out of the growth of someone else and who just seems to have good standards — good level-headedness about him. I know that to many people those last two things don't mean very much, but to all of us who have worked in centers, they mean a great deal. We hunt for people we feel will make a real effort to put people in a better position to meet life and who do not feel as though they have to apologize for their belief in such a thing as humility and that "I am my brother's keeper."

QUESTION 13 Does architecture matter much?

ANSWER Well, architecture matters all right. I've thought many times about the architecture which would be needed when a new center is constructed to replace Hines. I recall developing plans for that center to be located in about four different places when, finally, there is new construction. But as long as there is sufficient space so that there can be enough moving around, so long as there is more than one floor so that people have to get used to climbing and descending stairs, then to me beyond this the architecture doesn't seem too important. However, there is the matter of adding to the respectability and appeal of the whole program if the architecture attracts one. And I suppose, also, there is the matter of the acoustical characteristics of the place. This doesn't necessarily mean what people suppose, but rather — if too much sound is absorbed, the building becomes sterile and this is not good for a blind program. Architecture, however, is far subordinate, as far as I'm concerned, to personnel. And if one has to do with inferior personnel or inferior architecture, I know which I would choose: we would get along with less than the best architecture if we could have superior personnel.

QUESTION 14 Does curriculum matter much?

ANSWER Yes, if the curriculum is composed of those things which have been validated for use by blind people. The center staff is composed of people who support those things which are known to work for blind people. This is the curriculum of the blind rehabilitation center. This doesn't exclude research from a center, but the introduction of research items, along with validated items must be a little bit like putting a calculated strain on a solid relationship with another person. If there has been enough success with the validated items, then research can be introduced without straining the center-client ties too much. But if a person is introduced too soon, too much to things which haven't been validated, then purpose slips out of his center experience. The curriculum in any case really should be based on performing without eyesight. It shouldn't be piano-tuning, and it shouldn't be geography. It shouldn't be salesmanship, and it shouldn't be public speaking, and it shouldn't be vending stand operation. It should be those things which are basic in so far as performing without eyesight are concerned: modifications and substitutions whereby you perform by other than visual means.

QUESTION 15 What kind of people make a successful center?

ANSWER I interpret this to mean the people who make up the staff of a center — the people who go home at night and lead the kind of lives that most people in the United States do. I'm trying to say it isn't necessarily the sophisticated who would be in the theaters of New York or in the cafe society of New York each night and then return the following day to rub some of this off on to clients who come from Indiana or Kansas or Alabama or Montana. It does not have to be literary people who go home and read some of the very high class literature — the classics of the past — and then come in and attempt to engage in discussions of certain points with fellows who would be thinking in terms of reading the sports section or the stock market reports in the newspapers or who would be reading Western stories on the talking-book. I also think that one would need to be rather careful to avoid the unbalanced with a taste for the jolting kind of sex stuff that strives for success on the basis that it jars people, that it gives them a sort of vicarious type of experience. The thing that I'm trying to say is that I don't believe the center should be made up of people who are very far out in any direction. These are the people who would miss a close relationship with some of the clients who are pretty much ordinary folks. And I really do think it's pretty much incumbent on the staff to go away after work and just mix with life in a variety of ways — the man who's a specialist in repairs of all kinds or the man who fixes television sets, or who is taking piano lessons, or those who bowl. It's just these people who engage in life outside and bring a kind of refreshment into their relationships — because having recreated themselves — they bring what is both fresh and acceptable into their relationships with their clients.

QUESTION 16 How can you tell when the environment of a center is "sick"?

ANSWER You'll find "seeing" blind people and "blind" blind people buddying together to go places because each contributes to certain needs of the other. You'll find them linking up in chain fashion. You will find that clients are not meeting their schedules of activities. I think you will find that in some way there have been influences which have intruded and which are not really making a contribution to the major aims. Perhaps power wielded by clients has been used on staff in ways that made it impossible to pursue the aims of the center. There may be an inordinate dependence by the clients on the staff eyesight, just for doing things around the place, with the staff unable, or unwilling, or just uninterested in standing by the principles of teaching or perhaps striving to get modifications of the present techniques. You may find staff people failing to make the clients take money from their own billfolds when shopping. The pursuit of immediate efficiency has prevailed when it is easier to bring something to clients rather than to have the client go and get it. It's a sign of sickness when the center takes people to appointments purely for the sake of immediate efficiency. It's by doing things for themselves that they learn, but it takes quite a lot of time; however the place to take the time is at the center.

QUESTION 17 What should the staff-client ratio be?

ANSWER It should be pretty nearly one to one: a sort of tutor-student ratio. This can be altered some, depending on the kind of activity conducted. I think it also matters a great deal whether the center is made up of blind people who see some, or whether it's made up of blind people who see not at all. What I mean by this is that if there seem to be a large majority of persons who can see not at all, then the kind of teaching that has to be done demands that it has to be pretty nearly a one-to-one ratio. In certain of the areas we know the ratio need not be one-to-one. For instance, in manual skills there are times when a person who's in here learning some things and practicing and conditioning can be left to himself while the staff person is devoting himself to another one of the clients. This can happen in communication skills or in counseling. But across the board you have to keep in mind that learning is going to depend on a much closer relationship than we see in regular schools where a client can glance around the room, catch the eye of the instructor, suggest that he has something he's wondering about, get an answer that's communicated through the eye. This can't be done when there's no eye to be used in this way. The effectiveness of the center really depends on a very high ratio of staff to clients. If there's a good deal of sight among the blind people, then staff-patient ratio can be reduced markedly.

This brings up the whole question of the size of a center. On this subject I'd hate to set myself up as being too certain. I have said I would not wish to have a center much larger than 20. I have worked at a center around 10, sometimes fewer. Fewer than 10 is certainly not very good. Twenty seems to be very good. It can go up — somewhere between twenty and thirty, but I wouldn't want it to go over thirty. It seems to me that if this does occur, the closeness of the individual staff people (whose value is influence on the client) is lost. Then we also get a certain number of cliques among the clients, and the opportunity for influence of one upon another, rubbing off is reduced through the formation of cliques among your client group. I would say anything between eighteen and twenty-five is excellent so that the beneficial influences of one client upon another can really develop and that the staff people who have attributes which differ in certain ways can bring their attributes to bear upon each of the clients in the center.

QUESTION 18 How can unity of aims be achieved?

ANSWER This seems to be getting pretty much to the heart of what a center is and must be, what causes it to be worth something.

First of all, there should be a strong pivot person who believes that when sight is diminished, or lost, life can be pursued in effective ways and pleasure gotten out of it. I think it is important that there be some external forces that will support the pivot person as as he exhibits these beliefs. This is because there'll be certain forces in the center which from time to time will cause people to tire and have doubts. And there may be people in administrative positions, or a position of status or influence or power with matching doubts outside the center, where the pivot man inside the center can't prevail upon them. So there have to be certain forces out and beyond the center which exert some influence on status forces which would influence the pivot man and cause him to waver, or cause people around him to waver in the matter of zeroing in on the business of really and truly doing what can be done by other-than-visual means.

There are some extremely difficult conditions imposed upon the staff of a center. It is a group of people interposed between two groups of doubters. On the one side of this staff is the client group who come into this relationship without sufficient experience to realize that blindness can be lived out in quite wholesome fashion.

They have entered blindness for the most part, since we're talking about centers for adult blind people, after having seen. They have come from seeing society and bring into blindness many of the attitudes which are generally found to exist among seeing people. So that's why I call them doubters, and they come to the center to have their doubts removed. On the other side, is the seeing society itself. This is made up of doubters as well, because they have not had the experience either to make them believe in this idea that blindness can be lived out in quite wholesome fashion.

The staff is always in between these two groups trying to set up the learning situations under which the blind person will find life satisfying and gradually weaning him out into society, where he's going to live later. Here, as I see it, is one of the great special working conditions for the staff of the blind center constantly operating between two groups whose beliefs differ very much from their own. And they have to be strong enough in their beliefs to prevail while they have the newly-blinded person under their guidance and tow, so that they will pull him along and guide him along and teach him along until after a while he's a believer and reaffirms their belief that this can be done.

It takes strong people to go right out in front of society in the streets and do things that make blind people develop skills and acquire attitudes needed to perform in life under the embarrassment of blindness. This is the basic business of rehabilitation for blindness, and it's certainly very basic in the programming for blind rehabilitation.

These things are taken up first not because they are necessarily more important than another element I am about to introduce, but because they come first chronologically in the teaching process. Second from the standpoint of chronology would be dependence on the sight of others. Keeping aims unified in this matter of necessary dependence is crucial. Dependence of which I speak is not meant to be negative at all. It's legitimate dependence upon the sight of others which all people who are blind must live with, and it's expected.

As we teach techniques of doing things by other than visual means before we teach and encourage legitimate dependence upon the sight of others, it's extremely important that one doesn't derogate that dependence except when it's overdone. Along this line a vital part of the counseling process begins to move in, showing how not to court trouble and breakdown by inducing circumstances which cause backlash from people upon whom over-dependence is imposed. This is a very subtle form of teaching. It must move all through the management of sensory deprivation. We know from research — we know it anyway — that the mind of a person has a constant thirst for sensory income. It just has to have it all the time. In the face of this appetite for sensory stimulation, at times avid for attention, the staff must move in and acquaint the blind client with reasonable, balanced ways to depend on the sight and reporting powers of others, and also to acquaint him with some of the consequences if he over-depends on people.

I think that every center had better have these patterns pretty clearly in mind, or we'll suffer all kinds of things. And we particularly have to watch our co-professionals, such as psychologists, social workers and doctors, so they'll know what we're doing. Some of them know quite well what the consequences of deprivations are — without knowing how in this special field to prevent them. Here lies the area which some people (and all big dictionaries) call typhlology — the science that deals with blindness. Up to now there has been more art than science, but there is no reason to low-rate it for that. Those who practice this art, pure and simple but showing all the skills and ways and habits of thought and feeling that deal with blindness....those people are the heart of the staff of the center. And it is up to them to blend their skills with the skills of the co-professionals.

QUESTION 19 How do you keep roles straight in a center in terms of major aims?

ANSWER There must be specialists at a center and I think this is now rather well understood by the field: specialists in mobility, communication skills, manual skills. They know their skills and it's their job to instruct in these skills; a consistency of aims must be maintained so that nobody purposely, or accidentally, detracts from the respect which is due carefully validated techniques. Careless pooh-poohing of any specialty by another speciality is an indulgence which cannot be allowed; it makes a real chink in the armor of the center. The matter of keeping the roles straight is again a function of the leader. He has to see to it that his staff is composed, all along the line, of people who are oriented to support methods which — in the long range — work for blind people.

QUESTION 20 Speaking in terms of blind clients in a center, what does "over the hump" mean?

ANSWER This is probably local jargon, but in the context in which I've heard it used, it meant that it was noted by staff people that there was no longer a tug of war between them and a client, concerning the direction in which the program was going. This was shown in the film "The Long Cane" only after the hero had struggled very severely with the possibility of going home and of staying at the center. Both held trouble and tribulation. He had to weigh whether to go home to that type of tribulation or stay with the kind of pressure and challenge which was being put to him. Once he decided, then he went in the same direction that the staff had been proposing for him all the way along, and it seemed to become an easier path for both. This is something which can be seen in the center after it has occurred, but rarely in my experience have we seen just exactly when or what the circumstances were. We certainly couldn't do it as clearly as in the film "The Long Cane." I suppose quite often it's not dramatic: just the person gets tired of opposing a staff that is cohesive in its aims or develops a faith in what they are doing or gets fatigued trying "to fight city hall." Either of these is all right in my judgment because even if just from fatigue he retires from the fight and goes along with the staff, then there is a very great chance he'll find what they've been promoting works.

QUESTION 21 What is it necessary for the client to be told by medicine befor he enters the center?

ANSWER He ought to be told where he's healthy and where he's not. And he ought to be given some very factual guidance concerning the limits of activity, the safeguards that are necessary. The doctor in doing this has to realize, as I have mentioned before, that there are some risks in the rehabilitation process. This is a serious business, and the person who has had a heart problem ought to be given guidance with regard to the activity levels reasonable for heart patients. The safest course for the physician may be to tell a patient never to be active at all, since he feels that life doesn't hold very much anyway for a blind person, and he might as well take no more risks. In the case of a retinal detachment an eye physician can very safely say, "Don't do anything! You might endanger this retina." A very safe course for the physician, but it certainly doesn't offer very much opportunity for the blind person to develop. And as one doctor said, diving from a diving board or playing football may not endanger the patient a bit more than sneezing. It's rather hard to set up a regimen of life under which a person with a bad retina will never sneeze.

QUESTION 22 How do you get the staff to say what they think in front of doctors who are involved in the center operation?

ANSWER This again goes back to the leadership figure in the center. If — in any way — the leader is considered to be in an inferior role, the chances are that he will be very careful not to deal in the area of the doctor's specialty at all. But he and his staff without being experts, should feel free to give privileged information to the doctor — and they have every right and obligation to do this; the physician should have the same right to explore the field in which the staff is working with the problems of blindness. It's the leadership figure who has to make this understood, and that his people are no more to be condemned for an "uneducated" remark about something medical than is the eye doctor for showing a little naivete when he turns to the very difficult subject of blindness.

It is especially important to get the staff working with clients' to report on observed visual performance and the eye doctor should not hide behind his diploma. He must realize that his observations of visual efficiency were made under certain conditions in the clinic which may not include varying degrees of lighting, motion and the like encountered in daily living. He has to respect the fact that the staff people make what are less objective observations perhaps, but which often reveal visual efficiency, or the lack of it, of which he would not otherwise be aware. Unless he will really listen to evidence of this kind, and accept it for what it's worth, then he isn't playing his role in the center or making his maximum contribution toward its aims. He has to make it clear that he will not ridicule what appears inconsistent when it's reported to him in the right spirit. Otherwise, he'll cut off all communication. He has to make it clear that staff people are entitled to ask about anything which they do not understand and that certainly a client is entitled to do this too. There must be a constant rapid stream of communication and understanding and nothing in this very serious business of re-organizing to blindness is silly. Nothing at all. And there should be an understanding among the doctor, the social worker, the psychologist and all others, including the volunteers accredited to the program that, to the extent possible, each should know what the others know.

QUESTION 23 What are the reciprocal responsibilities between the medical profession and a rehabilitation center?

ANSWER Complaints of a medical nature will always be coming out to the staff of the center. Then the clients should always be encouraged to see the medical personnel associated with the center. But it also has to be understood by the client that the staff of the center are obliged as a condition of work to report complaints as well. If then the physician doesn't deal with the complaints within the framework of the aims of the center, he really disarms them in so far as their effectiveness is concerned. There'll be very legitimate complaints with an organic basis all right. These will come up when a person's in a center. A lot of times they pre-existed his arrival at the center, but were not of sufficient seriousness in the view of the client or the examining physician to be reported. But after blindness, which is given so much quarter in society, no longer is given much quarter in the center, then sometimes the client has to reach for attention to complaints of a lesser nature and they begin to come out in the center whereas they had not before. Now these have to be dealt with and understood, paid attention to by the doctor, explained away, managed, put up with, lived with, medicated for, or whatever has to happen to take care of them. Because if they aren't dealt with, they constantly disarm the staff of the center and much reduce effectiveness. Then, of course, as a part of the reciprocal responsibilities of the staff, if the doctor does put on certain limitations of activity, these have to be respected by the staff people, and they have to be very, very careful to do good reporting back to the physician on what they see.

QUESTION 24 Does it matter how money is raised for a center?

ANSWER Yes, it does, for there are ways that can detract from singleness of purpose. If the campaign is based on the wrong kind of emotional grounds, especially in the environment in which the clients perform, or in which they will perform later, then public attitudes can make it very hard for the client to secure control of his own life. For example the campaign for money cannot suggest to a community that an organization will "take care of the blind" for it, and then expect that community to make the all-out effort required to give the blind client his place in the world. If employers, who are approached to give jobs to blind people, say, "Why, I thought The Center for Blind People would take care of them," then there was something seriously amiss with the money-raising campaign.

QUESTION 25 Does the staff member require protection from society's inhibitors who would interfere with his concept or performance of his job?

ANSWER Yes, he does require this. I mentioned before that the staff people are interposed between two kinds of non-believers and so part of the on-going work with them is to keep an understanding that one of their working conditions is the wear and tear of trying to keep the non-believers from getting together in opposition to what he is trying to do. Sometimes society's inhibitors can appear in the guise of a higher echelon of administration which because of pressures, political or social, attempt to influence a staff member working with a client and try to dissuade him from a hard challenge that the staff person knows is given in the right measure under the right circumstances and in order that the client will learn something valuable. The staff member may be in no position, if confronted with this pressure, to resist it. So the pivot or leadership person in the center has to protect him. The pivot or leadership person has to be able to take and deal with the pressure. It might be from a doctor, saying, "These men can't go out on the ice. They may slip and fall." And the reply must stick when it is, "Oh, yes they can." I have known people to call up higher echelons of administration and insist that the staff people were not staying close enough to the client, or were exposing them to sawblades and all that kind of thing.

Naturally the upper echelon brought these complaints or inhibiting effects to the leadership, where all the factors were known that go into rehabilitation for blindness. It is for him to answer in all directions: that the staff is, after all, working under his direction, and if anything goes wrong he answers for it. And he must be the kind of person who can say, "The chances are small someone will get hurt, but the chances exist and they are the kind that have to be taken, because we're dealing with a serious matter which takes strong medicine, and it has risks. We will succeed far, far more often than we will fail, and certain risks must be taken if we're going to get growth." This person must be powerful enough and influential enough to make these things prevail. Whenever this element in a center is lost, and we can't provide strong medicine for a serious condition, then the center really isn't going to get the growth and development in its blind people that a center is for.

QUESTION 26 How long should a client stay at a center?

ANSWER Well, it's a matter of months — and they should stay while a success pattern continues for them — while growth is taking place, but no longer. They must not stay until they begin to backslide with regard to returning to a regular life in the community. There is a time when the community outside becomes more and more attractive to the client; but I'm sure this has a point of diminishing returns as he becomes more used to his successes. I'd say not over six months is pretty much of a rule, and, by the same rule, I think nothing less than three to four months. The client has to understand that this is a serious investment of time and that he will probably not see anything in the nature of real accomplishment before that much time has elapsed. He might, in a shorter time, have successes that will be rather pleasing, but he'll have them well mixed up with difficulties which are tantamount to failures. So it's three to six months — not so long but what the people at home will remember he's there and will indeed be returning home.

REHABILITATION CENTERS
THEIR GROWTH AND DEVELOPMENT

*By H. Kenneth Fitzgerald, DSW, and J. Albert Asenjo**

Rehabilitation centers, serving as efficient tools for developing self-reliance among blind persons, are recent phenomena in work for the blind going back not more than a half century.

However, concepts of rehabilitation, out of which modern centers have evolved, can be seen in many manifestations throughout the history of mankind. There always has been a sense of compassion for the handicapped person, especially the blind man.

Numerous biblical references to blindness are found which suggest we should not put obstacles in the way of blind persons. Rehabilitation, in one sense, is helping the blind person to avoid these obstacles.

In early Egypt, blind persons are known to have served as teachers of high priests and as court musicians. History tells us that these were professional positions, and in no sense were blind persons permitted to assume this type of responsibility out of a sense of mendicancy. For blind persons to achieve this level of professional development, we are led to assume the presence of an adequate system of education and training in the art of being blind and in considering blindness as only a limitation.

In studies of the sixteenth century, references are found suggesting ways to help blind persons to keep busy and live constructive lives.

Dr. Howe Pioneer of Modern Concepts

Dr. Samuel S. Howe may well be considered the pioneer of modern rehabilitation concepts. In his 1849 report as Director of the Perkins Institution and Massachusetts School for the Blind, he recognized many of the ingredients of services that we now identify as necessary for the rehabilitation of blind persons. All of his activities were based on the premise: "It should be a cardinal rule in the education of the blind to keep ever in view the fact that they are to become members of general society, and not of a society of blind persons."1/

Dr. Howe's thoughts on housing for his workshop employees were revolutionary for his day. He believed that persons should not be housed in a community for the blind but rather, live in their own homes or board in families near the place where they work. He stated, "the inconvenience of coming to the workshop daily, and going home to their meals would be more than counterbalanced by the great advantage of forcing them to take exercise in the open air. The advantage would be great."1/ This thought is truly a forerunner of some of our current concepts of orientation and mobility. Also, blind persons, "scattered about in private families, would keep up social relationships with seeing people; they would be still of the world... they would be less likely to cut off their relations with friends and kindred; they would be thrown more completely upon their own exertions and learn to go along; their love of independence would be gratified."1/ Dr. Howe's theories and practices not only encompass sound modern concepts of rehabilitation but actually outdistance many current service programs.

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St. Dunstan's First Center

Other spokesmen espousing a sound philosophy of rehabilitation can be found. However, it was only a half century ago that the world saw the development of the first rehabilitation center, as such. St. Dunstan's was established in England in February, 1915, to serve blinded veterans from World War I. While St. Dunstan's served persons from several European countries most of the 1,500 veterans who entered its portals between 1915 and 1918 were Englishmen. "The main idea that animated..." Sir Arthur Pearson "in establishing this Hostel for the blinded soldiers was that the sightless men, after being discharged from hospital, might come into a little world where the things which blind men cannot do were forgotten and where everyone was concerned with what blind men can do."2/

"Very quickly, however," Pearson writes, "I realized that it is the blind man who, above all, needs occupation, and that the more active, the more normal he can make his life, the happier he will be."3/

St. Dunstan's, therefore, developed into a hostel where blinded veterans could "learn to be blind." That phrase meant a great deal to Sir Arthur Pearson.

> "It involved a mental outlook and to establish this I thought that if they could step at once into a world where... blindness was regarded as a handicap only, a little world very much in touch with the big world around it, there would be no time for depression and its attendant evils. The interest in conquering blindness would begin at once. After all, it can be made very interesting to start a new life. For that is what a blinded man has to do. He has to learn to walk firmly and freely again, feeling his way about at first; he has to learn to read and write, using new methods and appliances; he has to learn to do things with his hands without the direction of the eyes, his first efforts as clumsy as those of a child. And he has to discover afresh his powers of accomplishment and enjoyment."4/

Pearson also discusses the need to develop the latent and unsuspecting strengths of the other senses to help the blind person to become "increasingly self-reliant."

First U.S. Center at Baltimore

This dynamic philosophy not only permeated St. Dunstan's in helping blinded veterans to reorganize themselves for rejoining society but also strongly influenced developments leading to the establishment of additional rehabilitation centers in both England and the United States. St. Dunstan's also took seriously its responsibility for after-care and hoped its example would be followed in aiding the civilian population.

In the United States, the first rehabilitation center for blind persons was established in Baltimore, Maryland, on a 100-acre estate taken over by the U.S. Government on November 15, 1917. The first blind men, all service casualties of World War I, were admitted in April, 1918. Evergreen - U.S. Army General Hospital No. 7 was thus established by the Surgeon General's Office as the "place to which the soldiers, sailors and marines are sent who have lost their sight as a result of the world war."5/

While the army referred to Evergreen as both a hospital and a school, the description states that —

> "The aim of Evergreen is to equip the blind man so that upon his dismissal from the service of the United States he may take his place as a self-supporting, self-respecting individual in society or be prepared to receive further instruction under the guidance and at the expense of the Federal Board for Vocational Education."6/

The program thoughtfully encompassed concepts of a "period of mental adjustment and physical readaptation," before servicemen were expected to undertake future plans. Courses were arranged —

> "to teach the blind men 'how to be blind;' to teach them that, though blind, they are still normal men; to impress upon them the importance of observing the usual conventions of life; the necessity for strictly living up to the rules of personal hygiene, of advantages accruing from association with normal people; to afford them an opportunity to develop latent senses so that, in a large measure, these may be substituted for the lost sight."7/

Shortly after the opening of Evergreen, the Red Cross Institute for the Blind was organized and established by the American National Red Cross at the request of the Surgeon General and housed in property adjacent to Evergreen. The Institute was to assist in making the life of the soldier more effective while at Evergreen and also after his discharge. It supplied the link with the servicemen's families and home communities.

Red Cross Took Over Evergreen

On May 26, 1919, the American Red Cross took over the complete administration of Evergreen. In an editorial, the Outlook for the Blind hailed "the wisdom of this transfer,"8/ since it was to create a unified operation and thereby nullify conflicts between the Red Cross and the Army. The American Red Cross then developed a working agreement with the Federal Board of Vocational Education. All soldiers undergoing treatment were discharged from the Army and turned over to the jurisdiction of the Federal Board with the understanding that the Red Cross was to operate the school. The Federal Board paid a monthly tuition and board rate.

Under an act of August 9, 1921, the work of the Federal Board for Vocational Education which handled disabled servicemen, was transferred to the U. S. Veterans Bureau. The cooperative plan with Evergreen, just noted, was continued.

On December 3, 1921, the Red Cross and the Veterans Bureau agreed that they should terminate their joint control of Evergreen and on June 1, 1922, the Veterans Bureau, through its Rehabilitation Division, assumed full control and financial responsibility for what was then officially designated as "Evergreen School for the Blind."

When the school was operated by the American Red Cross a major shift away from the previous adjustment approach was soon apparent and the educational nature of the program was moved to the forefront with four major sequences being offered — supplemental or preparatory, vocational, avocational and recreational.[9] Thus Evergreen continued as a pioneering venture in adult education of the blind but was definitely diverted from the original primary purpose of an adjustment center as emphasized by the Surgeon General.

Strong Educational Influence

Under the Veterans Bureau, the concepts of an adjustment center were again reintroduced but in a perspective different from, yet allied to, some of today's thinking about the functions of rehabilitation centers. Also, a strong educational influence still permeated the program.

Maurice J. Tynan, the last director of Evergreen, wrote the following about the time of the school's closing. "When men were transferred to the Evergreen School for the Blind, they were given fundamental training which was definitely outlined as follows:

1. Social Adjustment — accomplished by mingling with other men of similar disability, taking part in dances, theatre parties, games, etc., with the purpose of learning how to adapt themselves to live as blind men.

2. Learning how to read and write braille and operate a typewriter.

3. Development of the sense of touch through hand training.

4. Mental Stimulus — memory and mental training.

5. Recreation — training for leisure time through the medium of music and games and the reading of braille.

6. Specific preparation for employment objectives requiring higher education — learning to study as a blind person."[10]

The career of Evergreen terminated on June 30, 1925, primarily due to the limited number of blinded veterans who were in need of its services. However, during its life-time it stimulated much discussion and speculation about the need for either a National Center for the Blind, or, a group of regional centers through which blind persons could be helped with their adjustment. The fact that Evergreen accepted a limited number of civilian blind for training also gave recognition to the viewpoint among many leaders of the day, that centers for civilian blind were a necessity.

While Evergreen was still in operation, President Coolidge signed a bill in 1924 which included provisions for a "Permanent Home for Blind Soldiers." This home was to provide some adjustive and rehabilitative services, as these terms were then understood, and was also to be a headquarters for the United States Blind Veterans of the World War. However, it did not come to fruition primarily because of the economy wave which swept through the Veterans Bureau at that time.

Summer Programs Established

After the closing of Evergreen in 1925, there were no significant advances in the development of rehabilitation centers for the blind in the United States until 1942. In an effort to fill the void, the Minnesota School for the Blind and the Iowa School for the Blind established summer programs for the "social adjustment" of blind adults. For the fiscal years 1935 to 1943, the then designated Office of Vocational Rehabilitation reported that only 1,779 blind persons were rehabilitated for employment or about 1% of its total caseload.[11]

Shortly after the United States' entry into World War II, interest in a rehabilitation center for war casualties resulting in blindness was revived.

> "an informal committee was created in the Office of the Surgeon General of the Army in the spring and summer of 1942. The purpose of this committee was to investigate existing agencies for the blind both in this country and abroad. ...it was deemed imperative that retraining programs should be established in specially designated hospitals where social adjustment of the blinded soldier could be instituted while he was undergoing medical care."[12]

In April, 1943, the Office of the Surgeon General appointed a special committee on care of the blind.[13] Based on the extensive work of this committee, and that of its informal predecessor, "Valley Forge and Letterman General Hospitals were designated for the special treatment of blinded casualties."[14] The position of "Rehabilitation Aid to the Blind," was created and personnel were recruited from existing agencies and placed in these two centers. However, by the end of 1943, there was still no agreement between the military and the Veterans Administration as to which should carry "responsibility for full rehabilitation of the blind."[15]

The Veterans Administration had made no provision for accepting cases directly from the military and had opposed establishment of a rehabilitation center program for newly-blinded servicemen under the Veterans Administration auspice.

To resolve the conflict the matter was referred to "The President's In-Service Committee." On January 8, 1944, President Roosevelt "directed the Army to establish an institution for readjustment to be utilized by both the Army and the Navy."[16] providing that it would be for short term care only.

Old Farms Hospital Misnomer

On May 21, 1944, Avon Old Farms School at Avon, Connecticut, was secured and established as the "Old Farms Convalescent Hospital" and activated

June 14, 1944.[17] Thus, once again after a gap of 19 years, there was a social adjustment center for blind persons in the United States, although it, too, was limited to serving military personnel. The hospital name was a misnomer since Old Farms was an adjustment center.

On August 25, 1944, Dibble General Hospital was designated to replace Letterman General Hospital as one of the two hospitals designated for the special treatment of blind casualties.

Before and while these activities were underway, the Navy, Marines and Coast Guard were also concerned about blinded servicemen. After the admission of the first naval war blinded in January, 1943, the Philadelphia Naval Hospital was designated as the naval training center for the blind.

In addition to providing services within hospital, the Navy developed a two-week training institute in conjunction with the New York Institute for the Education of the Blind. The Army utilized this two-week training period for a few personnel before the opening of Avon Old Farms.

Avon Old Farms was deactivated on June 30, 1947, after three years of operation. It served approximately 850 servicemen, the majority of whom were from the Army.

Several observations about the hospital services are important because adjustment services actually began while the serviceman was hospitalized.

1. In the hospital all medical and surgical care was given. Thus, the duration of stay could be from a few weeks to several years depending upon the servicemen's physical condition.

2. The initial focus within the hospital was on aiding the servicemen to dispel the fear and shock of blindness. Thus, efforts were made to assist the servicemen to become personally independent as soon as possible.

3. Each trainee was assigned to an instructor or orientor, a specially trained person, who worked in cooperation with a blind consultant. Good posture, walking habits and development of ease and self-confidence, as well as freedom of moving about, were the focus of this training.

4. Efforts were made to involve the families of the trainees in this initial orientation either by having them visit the hospital or by correspondence.

5. A detailed psychiatric examination was made of each trainee.

6. After the trainees' initial furlough, following the completion of the above, communication skills, handicrafts and physical reconditioning were introduced as was an extensive recreation program.

Situation Reviewed After 21 Days

Avon Old Farms was established to continue with the process of social adjustment where the hospital left off. The program at Old Farms was a comprehensive and concentrated effort based on the belief in the ability of the blinded soldier to cope with his environment, his ability to gain in-sight into his problems and his ability to develop a plan of his own for future living.

After a serviceman was at Old Farms for 21 days, his situation was reviewed in a staff conference. Data considered included medical charts; service records; social background reports; clinical results of intelligence, interest, personality and manipulative tests; reports of interviews; and progress notes from teachers and orientors. The trainees' own plans were also encompassed. Following this comprehensive review, plans were carefully charted for the trainees' remaining 15 weeks at Old Farms.

The results with servicemen at Avon Old Farms were mixed. There were many successes. There were those servicemen who refused to face the problems of blindness. There were those who the staff were unable to help for one reason or another.

Discipline of Mobility Orientation

The combined programs of the hospitals and Avon Old Farms surmounted a hurdle that had retarded the development of rehabilitation centers in the United States. They gave extensive evidence that newly-blinded persons could learn to be blind in a time-limited period if there were sufficient personnel, equipment and services available.

Further, between Valley Forge Hospital and Avon Old Farms a new discipline of mobility orientation was born and began to grow, bringing a new vital influence to bear on all future activities in the field of services for the blind.

Before Avon Old Farms was closed out, plans were developed for the Veterans Administration to assume the responsibility for social adjustment training of blinded servicemen. On May 28, 1947, a Presidential Order called for this transfer of responsibility on July 1, 1947. The Veterans Administration Hospital in Hines, Illinois, was chosen for this central physical medicine and rehabilitation unit. However, the program was slow in developing because the Veterans Administration questioned whether the need existed for such a social adjustment program. The issue was resolved and in February, 1948, Mr. Russell Williams was appointed chief of the Blind Veterans Unit. The philosophy of this program is described in full detail in a comparison article which appears on page 32.

Advancement and Enrichment

Through the years, Hines has operated with the purpose of providing "basic patterns of personal organization for life without sight." These patterms extend to all areas which contribute to successful living — vocational, social, emotional, common skills and physical reconditioning. The Hines program has also contributed greately to the advancement and enrichment of mobility and orientation training.

Many leaders from across the nation in civilian programs visited Old Farms Convalescent Hospital and observed its methods and techniques for providing adjustment services for blinded veterans. They attempted to emulate the Old Farms program by establishing rehabilitation centers in their home communities. Two of the earliest were established in 1945 in North Carolina and in Florida.

During the period 1945 to 1950, approximately 30 agencies, both governmental and voluntary, claimed to have adjustment centers in operation. While there was general recognition that their services were similar in name, there were great variations in the quality of services and in the methods, techniques and intensities of services offered. Yet each center felt as if its program were meeting the needs of blind persons.

Workshop On Adjustment Centers

The Office of Vocational Rehabilitation and the American Foundation for the Blind, who were concerned about the great variations, undertook the joint responsibility of arranging for a national workshop on adjustment centers for the blind.

The purpose of this workshop, which became known as the Spring Mill Conference, was "to bring together personnel from all types of centers, and through intensive discussion of procedures and techniques to learn from each other and bring about as much unanimity on preferred procedures and techniques as may be possible."[18/]

Preliminary to the conference, nine rehabilitation centers were surveyed. The data gathered gave substantiating evidence of the existing confusion in programming and staffing. At the Conference members were divided into seven working committees. The combined contributions of these committees provided rehabilitation centers with the first organized material upon which a program might be based. Further, this Conference created a climate of mutal identity and cohesiveness among the then existing adjustment centers. Although all seven subject areas were of great value in giving direction and guidance to rehabilitation centers, the most lasting and influential areas were "travel techniques" and "the use of basic abilities by the blind."

Principles, Standards Are Needed

Between 1951 and 1955, rehabilitation centers for the blind throughout the country began to apply the methods and techniques developed at the Spring Mill Conference. Additional centers were established; some existing centers revised their programs, and others no longer classified themselves as centers.

This continued growth and interest in rehabilitation centers made it clear in the minds of leaders that principles and standards should be established for the guidance of current centers as well as for the guidance of newly emerging ones. To develop such principles and standards the Office of Vocational Rehabilitation and the American Foundation for the Blind again cooperatively sponsored a national meeting in February, 1956, which became known as the New Orleans Seminar.[19/]

To supplement and complement the Spring Mill Conference which dealt primarily with methods and procedures, the New Orleans Seminar focused on principles and standards for the administration and operation of rehabilitation centers. The accumulated experience of the participants, together with the rich insights of the resource personnel, made the New Orleans Seminar, and the report which followed it, one of the most valuable contributions for the advancement of rehabilitation centers to date.

Professional Staffing Clearly Identified

There was agreement on the term "rehabilitation center." A balanced view between administration and program activities was delineated and four basic areas of service were identified — medical services, psychological services, social services and vocational services — together with their interrelationships. Staffing, based on a clientele of not more than 20 trainees at a time, was also delineated.

This was the first time in the history of the rehabilitation center movement that adequate professional staffing was clearly identified.

By 1959, there was again concern among leaders in the field as to how rehabilitation centers for blind persons were applying the concepts, principles and standards of the New Orleans Seminar. Through a grant awarded by the Office of Vocational Rehabilitation, the American Foundation for the Blind undertook the responsibility and conducted a "preliminary fact finding survey and a planning conference."20/

The data derived from this preliminary study were carefully reviewed at the Conference of Administrators held in Washington, D.C. in April, 1960. While the report of this conference states that "centers are making an earnest effort to comply with the principles and standards of the New Orleans Seminar,"21/ it was apparent that a wide variety of procedures and practices still existed. There were also differences on the very principles on which they were based.

New Concept of Accreditation

Two significant recommendations were unanimously adopted by this Washington conference. One dealt with the necessity for having current detailed data about centers in order to assess the current status of rehabilitation centers and to assist in planning additional centers and facilities if needed. The other highlighted again a principle of the New Orleans Seminar, and a basic principle of sound administration, namely, that center programs must undergo regular re-evaluation of both their efficiency and the principles on which they are based. Many other important recommendations were made at this conference, but there is no evidence to date that action has been taken on them or the above two major recommendations.

The latest development which undoubtedly will influence programming and operations of rehabilitation centers is the concept of accreditation. An accreditation system was recommended at the Washington Conference. In recent years the Association of Rehabilitation Centers and the National Association of Sheltered Workshops and Homebound Programs have had studies underway which it is anticipated will lead to accreditation of "rehabilitation facilities."

Whether this program will encompass rehabilitation centers for the blind is still to be determined. Also, the Commission on Standards and Accreditation of Services for the Blind, sponsored by the American Foundation for the Blind, and financed by the Vocational Rehabilitation Administration, Rockefeller Brothers Fund, Irene Heinz Given and John LaPorte Given Foundation, Gustavus and Louise Pfeiffer Research Foundation and the American Foundation for the Blind, has established a committee to develop standards for rehabilitation centers.[23] As a part of its work this committee is sponsoring another conference of key personnel of rehabilitation centers — the fourth in the series beginning with the Spring Mill Conference. The purpose of this conference is to review critically the standards being written. Hopefully, in the near future an accreditation system will be in effect which can assess the quality and quantity of a center's program.

Number of Problems Remain

Throughout this 50-year history, rehabilitation centers have progressed and improved their efficiency. Much of this development has come in the last decade. Yet, much study, research and analysis of their methods and techniques needs to be done if centers are to serve blind persons still more effectively.

Clarification is needed on a number of problems, including:

1. The development and use of a universal definition of a rehabilitation center.
2. A clarification of the role of a generalized rehabilitation center in serving visually impaired versus the role of the specialized rehabilitation center.
3. A rehabilitation center's role as a social adjustment center, versus its role as an educational center.
4. A center's relationship to other on-going community services, both before and after the center's services have been utilized.
5. Differences in approach to totally blind versus partially sighted, and adventitiously blind versus congenitally blind.
6. Studies in what happens to clients between the time they enter and the time they leave the rehabilitation center.
7. A major follow up study of clientele after they have left the rehabilitation center.
8. A study of the number and location of specialized rehabilitation centers required to serve blind persons throughout the country, keeping in view the number of general rehabilitation centers which are serving or may serve visually handicapped persons.

Since so much critical data is missing about the role and function of rehabilitation centers, it is not possible to assess whether centers are truly meeting the needs of blind persons.

The short history of the work of rehabilitation centers for blind persons is a most noteworthy development in the long history of rehabilitation of blind persons. Yet, if rehabilitation centers are to achieve their true potential, they must, again and again, in diverse ways, re-examine their objectives and goals and their administration and services in the light of their objectives and in the light of the ever enlarging body of knowledge and experience of all facets of rehabilitation.

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PROGRESS IN THE TREATMENT OF BLINDNESS

*by David Paton, M.D.**

One in every five hundred persons in this country is blind; and, despite current medical accomplishments, the prevalence of blindness is increasing. This is due mainly to our enlarging population and to the fact that life expectancy is being prolonged and people are more prone to the multiple disorders which affect elderly eyes.

Thus, the problem of blindness in 1965 has mounting significance. It is now impossible to prevent or cure certain kinds of blindness. For other types, noteworthy progress has been made and future cures can be reasonably expected. The purpose here is to give interested laymen a capsule view of present medical knowledge of the treatment of blinding diseases.

Reflect Opinions of the Author

This chapter is necessarily incomplete. Moreover, the names of investigators and references to the medical literature have been omitted — not only for the sake of brevity but to avoid the quandary of selecting the most prominent contributors. The ensuing discussions reflect certain opinions of the author which must differ, at least in degree, from those of other ophthalmologists. But perhaps there remains one advantage: the author can consider the various medical advances quite objectively, for he has played no role in their inception.

Blindness has scores of causes, and progress in its prevention and treatment depends upon many scientific "break-throughs" in each category of disease. New advances in the future will be based upon today's observations, including research findings whose meaning and application are not yet clear.

It is not easy for anyone to recognize the important discoveries or pass over the inconsequential ones. The news media are forever searching for emotion-charged, eye-catching stories; and a reporter's enthusiasm may sometimes permit him to over-dramatize for the sake of producing an exciting article. This tendency is understandable, but it can have the unfortunate effect of raising false hopes among the blind and their many sympathizers. The same inherent risk is present in a brief report such as this: certain subjects must be oversimplified and others left out; all topics lack the proper perspective, which only the future will determine.

Before discussing selected areas of progress in treating blinding diseases, we should look at a few of the limitations and popular misconceptions in this field. For example, when there is complete destruction or atrophy of an optic nerve from any cause, there is no means to restore sight to the affected eye. Some of the nerves in the body, when damaged, can "re-grow"; but the optic nerve can not. The two optic "nerves" are actually tracts of the brain; and once brain tracts are damaged, their fibers can not regenerate.

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Misconceptions Among Lay People

This also applies to the specialized, light-sensitive nerve cells of the retina, the rods and cones. Once these are devitalized, they can not be replaced by new cells — as does occur in many other body tissues. Therefore, if the specialized nerve tissues of the eye have been lost through disease, blindness is irreversible.

A frequent misconception among lay people is that whole eyes can be transplanted from one person to another for restoring vision. This misunderstanding has come from the publicity (itself desirable and fruitful) awarded to "eye banks." which have been active in the United States since 1944. Although the entire eye is usually removed from a deceased donor, only certain parts of the eye can be grafted onto the eye of another person.

This is in contrast with recent experimental work that indicates success in transplanting a whole eye from one developing salamander to another. In higher forms of animal life, there is a far greater tendency to reject donor tissue (which is similar to an allergic reaction); and this is a major reason why greater portions of the human eye can not be grafted.

The best-known and most important of human eye-tissue substitutions is transplantation of the cornea. Transplants of sclera and vitreous can also be performed. In all these transplants, much of the donor tissue is eventually replaced by new cells of the recipient eye. But, since new nerve cells do not grow in the retina, as cells of the cornea and sclera can regrow, there is no hope of performing a transplant of a human retina — or an optic nerve, or an eye.

Surgical Advances Rate Attention

What, then, are we accomplishing in the treatment and prevention of blindness? And what are our reasonable horizons of hope? Recognition should be given to new medicines for treatment of ocular inflammations and altered physiology (such as modified corticosteroids, new antibiotics, and improved glaucoma agents); also, genetic counseling and other aspects of preventive ophthalmology have taken great strides.

But, today, recent surgical advances probably deserve the greatest attention in considering the treatment of blindness.

A. CORNEAL DISEASES

The cornea is the window of the eye — the transparent, non-vascularized, anterior surface. Vision can be limited to light perception alone by severe degrees of corneal damage resulting in complete loss of transparency.

On a world scale, diseases of the cornea are undoubtedly the leading cause of blind eyes. This is due to the persistence of vitamin deficiency diseases, trachoma, and inadequate medical care of corneal infections and injuries. An estimated 20,000 children each year are blinded by a corneal disease known as keratomalacia — due to vitamin A deficiency, and virtually never found in the United States.*

May Be Identical With A Virus

Many millions of people are blinded by trachoma (a virus disease of the eye now rarely seen in most areas of this country), which directly affects the cornea and may also cause blindness by secondary opacity from damaged eyelids. Fortunately the virus of trachoma is sensitive to antibiotics, and new work being done on trachoma vaccines has much promise in minimizing this disease, which is one of the oldest and worst scourges of mankind.

Preliminary data recently obtained indicates that the trachoma virus may be identical with a virus cultured from the female genital tract; the epidemiology of the disease and the means to provide adequate therapy and/or vaccination to the populations of many underdeveloped countries is one of the tasks which remains of great importance to those interested in world blindness.

In the United States, the chief causes of blindness from corneal opacification are infections, hereditary degenerations, and injuries. There is little that need be said here regarding prevention of the latter two categories; and most bacterial infections can be checked by prompt medical therapy. An outstanding example of what can be done in prophylactic treatment of infections which can destroy the cornea is the story of ophthalmia neonatorum. Probably the leading cause of childhood blindness in the 19th century, ophthalmia neonatorum (a purulent infection of the external surface of the eyeball in newly born infants) was found to be an infection acquired from the mother in the process of birth. Eyedrops of silver nitrate (now penicillin), instilled routinely into the eyes of all infants at birth, reduced this blinding disease to a rarity.

IDU Has Definite Limitations

Perhaps the most troublesome present-day cause of corneal opacity from infectious disease is a prevalent virus, herpes simplex, the organism responsible for "cold sores" in or near the mouth. Herpes affecting the cornea has proved quite resistant to the multiple treatments which have been tried in the past. In 1962, a medication known informally as "IDU" (an antimetabolite) was reported to be extremely effective in the treatment of fresh cases of herpes of the cornea.

At first it seemed that IDU might provide the final medical answer to corneal herpes. But, as with so many other advances which are initially heralded with great excitement, the value of IDU has since been found to have definite limitations — certain strains of virus being quite resistant to it. Other antimetabolites are being tried, but as yet the treatment of corneal herpes remains far from satisfactory. This is particularly true of chronic cases in which the disease resides deep within the cornea.

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* Vitamin A is used by all tissues of the body and, as many non-medical persons realize, plays an important role in the synthesis of visual pigments in the retina. Although in severe vitamin A deficiency, night blindness and corneal softening (keratomalacia) can occur, the normal American diet contains ample amounts of vitamin A. Thus, there is no need to supplement the diet with this vitamin in hope of improving vision; in fact, damage to the optic nerve can result from excessive ingestion of the vitamin.

Corneal Transplants: Transplantation of corneas was first envisioned in the 18th century; attempts to use animal corneas in human eyes were undertaken in the 19th century. It was more than one hundred years later before corneal transplantation became an established part of the ophthalmologist's surgical resources — and it is still not feasible to use full thickness corneas from anything but the human species. In various parts of the world, current work is being done with experimental transplants of corneas from certain fish, bull-frogs, chickens and other animals to recipients of other species; but as yet it is far more satisfactory to use human corneas for grafting purposes. Even then, as will be discussed here, the results are not uniformly satisfactory.

Transplant Not Always Tolerated

During the past two decades, corneal transplantation has been technically perfected to the point that the surgical procedure itself offers relatively few difficulties. Improved suture materials, operating microscopes and delicate instruments permit corneal grafting to be performed with relative ease and minimal hazard. The chief problem of corneal transplantation is the often unpredictable rejection by the patient's body of tissue received from another person.

As with the grafting of other tissues from a human donor to a human recipient, a corneal transplant is sometimes not tolerated by the eye of the host. The transplanted cornea then loses its transparency, becoming cloudy or opaque.*

The problem of "homograft reactions" is now being intensively studied in an effort to decrease the likelihood of graft failure. Current efforts include the following: 1. obtaining donor corneas when they are very fresh; 2. improving techniques for deep-freezing corneal tissues, so that all cells remain viable; 3. devising tests for the viability of the inner (endothelial) cells of the donor cornea, such as histochemical staining of the other cornea from the same donor; and 4. modifying the antibody or immune response of the recipient so that a homograft reaction, if it occurs, will be less severe and not fatal to the graft.

Many opaque corneas are never grafted due to the certainty that the graft would become opaque. The main reason for unsuccessful corneal transplants is the presence of blood vessels in the opacified host cornea, which increases the likelihood of a homograft reaction. Radiation of corneal blood vessels, various surgical interruptions of the vessels, and topical medication to retard vascular growth have been quite ineffectual.

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* Tissue transplanted from one part of the body to another part of the same body is called an autograft; transplants between two members of the same species are called homografts; and transplants between different species are called heterografts.

When a clear graft cannot be anticipated, a potential alternative being explored is the use of a synthetic cornea (keratoprosthesis). Several laboratories are now engaged in designing and testing a variety of such synthetic devices. Theoretically, if a transparent, non-irritating substance is found that the patient's corneal tissue does not reject, it will serve as an artificial window in the cornea. The light could then pass freely through the synthetic window within the otherwise opaque cornea, on its way to the retina.

The prosthesis itself has to be an integral part of the anterior wall of the eye. However, no similar implant or artificial device has been developed for any other part of the body — with the device partly imbedded in the host tissue and partly exposed at the body's surface — which the patient's body has not eventually rejected. In some medical centers, keratoprostheses are being used in human eyes — for desperate cases. No ophthalmic surgeon today is yet willing to consider corneal prostheses as being beyond the experimental stage.

Thus, despite some preliminary, optimistic reports, it may be years before dependable artificial corneas can be used with assurance and safety as a substitute for an opaque cornea. It is certainly one approach which offers future hope for the many persons, now completely blind from corneal disease along, who cannot be treated successfully by corneal transplantation.

B. CATARACTS

After light passes through the cornea and pupil of the eye, it then passes through the clear (crystalline) lens to be focused on the retina. A cataract is, by definition, any degree of opacification of the crystalline lens; but, for practical purposes, it can be considered opaqueness of the lens sufficient to cause loss of vision. As with opacity of the cornea, the lens may become so opaque that vision is limited to mere perception of light. But when a cataract is the sole cause of blindness, it can be removed by surgery and visual acuity restored to normal. After removal, it is necessary to compensate for the absence of the eye's lens by the use of strong eye-glasses or a contact lens on the cornea. Intraocular plastic lenses as substitutes for the crystalline lens have been given fairly extensive clinical trial, but thus far they do not seem to warrant the risks of complications which their presence within the eye entails. Although cataracts have many causes the end result of impaired vision is the same.

Removal of Cataracts: From time to time there are unsubstantiated reports of medical treatments which either arrest the development of lens clouding, or make an opaque lens again clear. As yet, however, there is no proven effective method of halting, clearing or dissolving a cataract with medications. But such discoveries can reasonably be expected. In some cases of diabetes in children, an immature cataract may develop if the diabetes is not under adequate medical control. If the clouding of the lens has not proceeded too far (at which time the lens protein is irreversibly altered), the lens may become clear again by promptly regulating the diabetes itself. These cases are exceptional. As a general rule, cataracts require surgical removal when they reach the point of causing serious impairment of vision.

Surgery Minus Anesthesia

In the seventeenth century, a cataract operation required only a few moments. The unanesthetized patient would sit facing his surgeon, with arms wrapped around the doctor's waist. The surgeon would thrust an unsterile needle through the cornea and drive the cataract into the vitreous cavity. This indelicate procedure, called "couching of the lens," was followed by a very high incidence of post-operative infection and inflammation, and must have led to eventual blindness in the majority of cases.

Most eye surgery today is still performed without general anesthesia — for there is less risk to the patient if local anesthetic agents are used. Occasionally a specially trained ophthalmologist has reported excellent success with hypnotism alone, but use of this added and potentially hazardous skill is hardly a useful direction for future investigation by ophthalmic surgeons, for local anesthetics have been developed which give excellent and long-lasting anesthesia.

The general principles of cataract surgery are no longer new. An incision is made (usually beneath a protective flap of conjunctiva) which is almost 180 degrees of the circumference of the peripheral cornea. Sutures are preplaced in the surgical wound, a small peripheral hole or a sector defect is cut in the iris, and the cataract is then grasped with either forceps or suction-cup and delivered through the incision. The sutures are tied, and the eye dressed with medication to prevent infection and reduce intraocular inflammation. Because of sterile technique and available medications, significant postoperative infections are extremely rare (one in several thousand cases). It is almost always the surgeon's intention to remove all of an adult's cataract within its capsule; and in the case of children, when the lens is adherent to the vitreous, to leave the posterior lens capsule within the eye. These are tried and true generalizations.

Danger of Side Effects

A variety of additions to traditional surgical techniques have been developed recently that facilitate, simplify, or add safety to the removal of cataracts. In the past six years, an enzyme has been used which helps in extraction of an opaque lens, by releasing, at the time of surgery, the zonular fibers which hold the lens in place. The use of the enzyme (alpha chymotrypsin) definitely helps to assure removal of a cataract within its capsule by avoiding the necessity of mechanically breaking the zonular fibers and risking adverse pressure on the cataract itself.

However, because of potential side effects, such as damage to corneal cells and transient glaucoma, most ophthalmic surgeons now use this enzyme only in those cases in which the zonular fibers are believed to be unduly strong in comparison to the pathological delicacy of the cataract's capsule.

Another example of improvement in cataract surgery has been the reintroduction, several years ago, of a method for the extraction of congenital cataracts in children. By the use of one or more hollow-bore needles, all or most of an advanced congenital cataract can be drawn out (aspirated) from the eye. With this technique, the incision may be so small that no sutures are required, a particularly favorable circumstance in children who cannot be expected to observe the postoperative precautions demanded of adults.

A third example of a useful new method in cataract surgery has been the application of refrigerated instrument-tips (approximately -40° C) which can form a frozen union between the instrument and cataract. This makes it somewhat easier to remove the cataract without rupture of a fragile lens capsule than when usual extraction methods are employed. Dry ice and methyl alcohol, thermoelectric freezing, liquid nitrogen, and liquid freon are the various means of instrument-tip refrigeration which have been introduced to ophthalmic surgery within the past two years. The techniques of cryosurgery (from "cryos," ice cold) have several areas of application in ophthalmology; but, thus far, their true value has not been adequately determined.

In summary, the treatment of cataracts still remains completely surgical, but several new improvements in operative techniques have been recently introduced.

C. AMBLYOPIA

The refractive ability of the eye depends on the combined light-focusing power of the cornea and lens, acting together to give a sharp image on the retina. Vision loss or even blindness can result from early disuse of an eye because of a significant difference in refractive ability of the two eyes. One eye may be more nearsighted than the other, or have a higher degree of corneal irregularity (astigmatism). The eye which is more nearly normal is instinctively preferred, while the eye with the greater refractive error often becomes a lazy eye; this causes reduced vision (amblyopia ex anopsia) which by mid-childhood becomes irreversible if not treated. Often amblyopic eyes deviate inward or outward, requiring corrective ocular muscle surgery — but that is another vast subject which can not be considered here.

Means of Correction In Childhood

About 3% of the adult population in this country have amblyopia ex anopsia in one eye. Early detection can usually prevent blindness if the difficulty is properly treated.

There are a number of well-known means of reversing amblyopia when it is detected in childhood, such as providing the proper eye-glasses and covering the good eye to make the lazy eye functional again. In the past few years a new technique known as pleoptics (designed to restore the function of the macula by light-stimulating "exercises") has been introduced from abroad; but it has not been awarded lasting enthusiasm by many investigators in this country, despite initially favorable reports which spread to the lay press.

To prevent disuse of an eye with a high degree of refractive error, surgical reshaping of that eye's cornea — to reduce its refractive error, and thereby permit its simultaneous use with the patient's more normal eye — has great theoretical advantage.* Such an operation has been conceived and reported only recently. It requires slicing off a split-thickness (lamellar) section of cornea which is then frozen hard and ground on a lathe to modify its curvature and thus its refractive power.

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* Although the crystalline lens is flexible and thus is responsible for the eye's focus on near and far objects, more than two-thirds of the refracting power of the eye derives from the cornea itself.

Finally this modified anterior layer of cornea is sutured back onto the eye from which it was taken. Although this procedure constitutes an "autograft" rather than a "homograft" (see section A), it nevertheless involves the danger of postoperative infection and some loss of corneal transparency at the interface between the replaced tissue section and the underlying corneal bed. The procedure is still insufficiently developed for clinical use; but it may some day prove to be an important advance in prevention of ocular disuse, as well as a means of minimizing the thickness of corrective spectacles.

D. RETINAL DISEASE

Diabetes: One of the leading causes of blindness from retinal dysfunction is the occurrence of complications in the eye resulting from diabetes. Diabetes can lead to alteration of blood-vessel walls, with resultant formation of tiny aneurysms and the release of retinal hemorrhages and exudates. In some cases of long-standing diabetes, an undesirable increase in the number of fine blood-vessels occurs on the surface of the retina (retinitis proliferans); the proliferating vessels eventually extend into the nearby jelly-like vitreous that fills the main cavity of the eyeball. This process often leads to destruction of the retina and loss of vision. At present, there is no known therapy which will prevent the onset of diabetic retinal complications. The development of these changes in the retina seems to depend more on how long the person has had diabetes than on its severity in terms of medication requirement or the difficulty in controlling the disease.

Methods of Treatment: One currently considered method of attempting to reduce the eye complications of diabetes was discovered by accident 13 years ago. A pregnant woman who had severe diabetic retinopathy sustained a hemorrhage within her pituitary gland. The various clinical signs of pituitary insufficiency developed, and she was treated with pituitary extracts. Her physician later observed a striking improvement in the condition of her eyes, with lessening of the diabetic retinopathy.

Various groups of doctors throughout the world are now studying the effect of intentionally damaging or removing the pituitary gland in diabetics whose retinal disease threatens permanent blindness. In almost every series reported thus far, there have been a number of impressive cases showing marked improvement after complete or partial destruction of the pituitary by surgery or radiation. However, in many other cases there has been no improvement; and, unfortunately, there are major risks and undesirable side-effects of this ablative therapy. In summary, pituitary surgery for diabetic retinopathy remains still another experimental procedure, to be used only in those selected patients who fully realize its possible complications, and in whom blindness has not become permanent from retinal scarring or detachment.

Retinal Detachment: The retina, classically described as having ten "layers" and being only 1/10th to 1/2 of a millimeter in thickness, lines the inner, posterior two-thirds of the eyeball. Occasionally, retinal holes (or tears) occur due to degenerative conditions, traction from the vitreous, high degrees of myopia, etc.; and the retina then becomes separated (or detached) from the inner wall of the eyeball.

The greatest progress in treatment of retinal blindness has come from major surgical advances in treatment of retinal detachments. Using one of the newer instruments (the binocular indirect ophthalmoscope), the ophthalmologist has a broad, three-dimensional view of the inside of the eye. By visualizing the entire retina with this instrument, retinal holes — the underlying cause of retinal detachment — can be much more readily identified than with former instruments. The holes can now be accurately closed off, since this instrument is used throughout the surgical procedure.

Operative Success Rate Above 85%

Another equally important advance has come from the development of methods which bring underlying ocular coats into contact with crucial areas of detached retina. The general technique (known as scleral buckling) creates inward bulging of a portion of the eyeball by use of a prosthetic implant which is permanently placed within the scleral coat, or by a silicone belt that is secured about the circumference of the eyeball.

Surgeons throughout the country are using these techniques increasingly, and an overall operative success rate for retinal detachments may now be more than 85%. A decade ago, the same cases would have been treated with less than 30% success. Moreover, many additional cases which in past years would have been considered inoperable can be treated successfully.

Postoperative immobility of the patient has been greatly reduced by scleral buckling surgery, and patients are often allowed out of bed shortly after the operation and discharged from the hospital within a week or ten days. However, persons with long-standing detachments may not recover vision even if the retina can be restored to its original position, for the viability of retinal cells does not endure indefinitely once the retina has become detached.

Two new modifications of the same principle for prophylactic treatment of retinal holes when the retina is not yet detached are helpful in preventing retinal detachment. Not long ago, both of these now widely-known innovations would have seemed as exotic as Buck Rogers' ray gun. One is the photocoagulator, in use for the past 14 years; the other, introduced more recently, uses a laser beam. With these instruments, a beam of high intensity light is directed through the pupil and coagulates a spot of tissue at the proper place on the retina, producing a small scar. Thus, the edges of a retinal hole can be spot-welded (so to speak); and by the subsequent, localized scar-formation held firmly in place against the underlying tissue, thus preventing a retinal detachment by closing off the retinal hole.

Still Not Enough Information

Light coagulation can also be used to abolish vascular malformations of retinal blood-vessels, and it has several other clinical uses. It has the great advantage of avoiding surgery to accomplish the same ends. It must be pointed out, especially with reference to the laser, that we still do not have enough information about the possible latent damage such a beam of light may cause on its way through the vitreous to the retina. Two other methods of producing the necessary tissue scars are long-used diathermy (heat) and recently adopted cryothermy (cold); both require a surgical exposure.

Other Retinal Diseases: There are several hereditary retinal disorders (classified as "tapetoretinal degenerations," and including retinitis pigmentosa) which lead eventually to complete destruction of the retinal cells. These disorders have no exact equivalent in animals, although in certain strains of laboratory animals similar degenerative changes can be produced by controlled breeding. Since the fundamental defects initiating the primary retinal degenerations have not yet been found, effective methods of treating or preventing them may not become available in the forseeable future. There hereditary occurrence, however, is often predictible.

There is still a large group of miscellaneous retinal diseases which cannot be considered individually here. These include: primary vascular diseases, atrophies of the retina, and a variety of degenerations occurring at the retinal area of greatest visual acuity, the macula. As with retinal disease in general, the most important approach to these degenerative and vascular changes will be through efforts to prevent their development, rather than attempts to restore vision once the damage has occurred. For most, the cause (pathogenesis) is not understood; and appropriate treatment usually depends upon a clear knowledge of the basic defect.

Retrolental Fibroplasia: It was not until the 1950's that a peculiar disorder of the retina — characterized by distortion and proliferation of the retinal vessels, and folds and detachment of the retina — was attributed to an excess in oxygen concentration in the incubators of new-born infants. Previously, retrolental fibroplasia was the leading cause of blindness in children. Nearly three-fourths of the children in blind schools at one time suffered from this disorder. Although there is no way of reversing the damage the excess oxygen has caused on the retinas of affected patients, new cases of this disorder are extremely unusual. Retrolental fibroplasia is an excellent example of how a previously mysterious and prevalent condition can be prevented when its pathogenesis is understood.

Retinoblastoma: Some comments should be included on at least one malignant disease of the eye; and retinoblastoma, although not common, is the most appropriate. This malignant tumor of the retina occurs once in approximately 23,000 births; in one-third of the cases it is bilateral (both eyes are affected); and, being genetically determined and dominant, it will occur in 50% of the offspring of those who survive the tumor to have children of their own. Once this tumor has spread beyond the eye, there is no known way to save the patient's life. Early recognition, scrupulous examination of both eyes, and appropriate therapy are mandatory. If the tumor is unilateral, removal of the affected eye can be lifesaving.

The same is true of bilateral tumors — but because of the undesirable aspects of removing both eyes, radiation therapy with specially adapted x-ray machines, light-coagulation of smaller lesions, or seeds of radioactive material can sometimes be used successfully. Systemic therapy with antimetabolic drugs is now often used in an effort to kill tumor cells; but, although these may be useful adjuncts to the therapy of intraocular tumor, they have little lasting benefit when the tumor has spread beyond the eye.

Thus, again, therapy for this disease is most effective when used early, but prevention would be a more desirable approach. Genetic counseling for all survivors of retinoblastoma should always be given, and offspring of such persons must be rigorously examined throughout childhood. Retinoblastoma is the only truly hereditary malignancy of man.

E. NEARSIGHTEDNESS (MYOPIA)

Myopia, or nearsightedness, is not only common but its extreme forms are a major cause of eye disorders which can lead to blindness. Most persons with high degrees of myopia have an abnormally large eyeball — which relates to complications such as retinal detachment, or to an inadequate blood supply to the retina and consequent loss of vision from retinal degeneration. Although there is now no known way of preventing myopia, which is probably most often genetically determined, a number of surgical procedures are being tested with selected myopic patients. These experimental operations are intended: 1. to reduce the size of the eyeball by surgically shortening (by a tissue "tuck") or by invaginating a zone of the scleral coat at the equator of the eyeball; or 2. to modify the curvature of the cornea so that unduly thick spectacle lenses are not required. (See section C).

The eyeball-shortening procedure has the theoretical advantage that, by reducing the size of the eyeball, it may be possible to prevent future retinal detachment or degenerative changes. No information is available in that regard as yet.

F. GLAUCOMA

Glaucoma is the condition of increased pressure within the eye, leading to damage of ocular tissues, especially the visual cells of the retina. Glaucoma has many causes — some common, some rare. Certain types of glaucoma can be cured by surgery, but usually glaucoma is considered a nonsurgical disorder, unless medical therapy is inadequate. About one million persons in the United States have glaucoma; and of the 400,000 persons who are "legally blind," an estimated one-fifth have glaucoma. It is unquestionably the most significant cause of blindness in the United States.

Unlike cataracts, the blindness caused by glaucoma is irreversible; yet, almost all cases of blindness from glaucoma could have been prevented by appropriate early treatment. Glaucoma, like diabetes and heart disease, is usually a chronic condition requiring careful medical supervision.

In recent years, efforts to improve the care and control of glaucoma have centered on basic research into its causes, persistent clinical efforts to improve surgical techniques, and a concerted nationwide emphasis on the importance of early detection by population screening. According to most estimates, more than 2% of adult persons have glaucoma. Among those with a family history of chronic glaucoma, the incidence is considerably higher.

100-200 Patients For Each Doctor

Instead of discussing glaucoma research, or developments in medication and surgery, I should like to stress one aspect of glaucoma which I believe has received too little attention: an example of inadequate progress in the care of blinding diseases.

Although glaucoma causes at least 15% of the blindness in this country, a relatively small number of physicians must treat a large number of patients with this disease. If all physicians in the United States who are qualified to manage glaucoma are grouped together, a conservative estimate shows that there should be approximately 100 to 200 glaucoma patients for each physician. And glaucoma, as mentioned, is usually a chronic ailment whose course and control must be precisely monitored; thus, each patient should consult his ophthalmologist several times a year, even when thought to have optimal control of intraocular pressure.

Practical measures for improving the management of glaucoma in this country have not kept pace with current knowledge of how blindness from glaucoma can be prevented or checked. We know that every patient's intraocular tension should be constantly kept at normal levels, and we know that every patient's visual fields must be retested to further assure proper control of his eye disease. The treatment of each patient, whether it is medical or surgical, must be custom-designed. There is nothing to indicate that glaucoma can ever be managed by predetermined formulas.

Community Facility Needed

Thus, the ophthalmologist is faced with a time-consuming responsibility for each of his patients with glaucoma; yet these cases usually comprise a minor portion of his total practice. At present, because of the number of patients, there seems to be no adequate means of assuring optimal nationwide glaucoma management, if all the testing and retesting of glaucoma patients is performed exclusively by ophthalmologists. In my view, the crux of the problem is the extent to which ophthalmologists are willing, and are legally able, to rely on technical assistants in performing the various tension and visual-field tests that each case requires for proper management.

To improve glaucoma detection and management, a community glaucoma facility could be established in every large population center to expedite the work of practicing ophthalmologists. Such glaucoma "testing stations," organized with uniform standards of technical training and testing methods, should be supervised by a local committee of ophthalmologists.

The trained technicians would perform measurements of visual acuity, visual-field testing with standardized test objects, and other procedures (such as tonometry, and tonography — with or without a water provocative test) as requested by the ophthalmologist, as is now provided by technical workers in hospital-affiliated glaucoma clinics throughout the country.

The availability of the testing service to all glaucoma patients or "glaucoma suspects" would certainly improve the quality of glaucoma care, and these gains could be achieved without detracting from the ophthalmologist's prime responsibility for the management of his cases. At the same time, useful data could be gathered on how glaucoma can be optimally controlled. At present, it is often hopeless to compare management techniques of one doctor with another, because of their separate testing standards and individual preferences in methods of control of intraocular pressure.

The main difficulty of this suggested public-health enterprise is that it relies on trained technical workers to perform the routine glaucoma tests that are now performed either by the ophthalmologist himself or by a lay assistant who works in the physician's office or clinic under his direct supervision. That is quite different from having the same (but universally standardized) tests performed at separate community centers. Medical technicians at the glaucoma testing stations could be schooled and examined so that they would have competence and responsibility comparable to that of medical assistants in various other fields of medicine.

The function of the ophthalmic technician, in relation to the ophthalmologist, would be comparable to a physiotherapist in relation to the orthopedist, or an x-ray technician in relation to the radiologist.

Doctors Must Remain In Charge

If a plan of this kind is ever adopted, such routine testing must be done only with the request, the direction, and the supervision of ophthalmologists. All decisions regarding medical management — including interpretation of test results, the prescription of medicines, and the decision for medical or surgical treatment — should always be the sole task of the ophthalmologist, with each patient remaining strictly under the care of his own doctor. There is a valid concern that training ophthalmic technicians would lead to efforts to have them become an "independent" and possibly certified group — and that even optometrists would then claim the right to perform glaucoma tests on persons coming to their offices.

It cannot be overemphasized that the diagnosis and management of glaucoma must be in the hands of medical doctors, and that no proposal to relieve the burden of testing should permit a compromise in the ophthalmologist's obligation to be in full charge of the patient's care.

We must soon design efficient and effective ways to manage, with optimal supervision, the million patients in this country who have chronic glaucoma. Practical solutions must keep pace with present needs and present knowledge. There are now too many cases of glaucoma for each doctor to handle by himself with the careful scrutiny the disease often requires.

G. UVEITIS

The pigmented tissues of the eye — the iris, the ciliary body, and the choroid — are known as the uveal tract; inflammation of these tissues is called uveitis; often the retina is involved — sometimes primarily. In this country, uveitis causes 10% to 20% of all blindness.

There are multiple known causes of uveitis, but too frequently the individual diagnosis is merely presumptive. Twenty years ago, tuberculosis was thought to cause about 80% of so-called granulomatous uveitis. Now, toxoplasmosis (either as an acquired infection or from intra-uterine exposure) is thought to be the leading cause of granulomatous uveitis. In almost every case, however, the preferred treatment is one which uses either general (systemic) or local (topical) corticosteroids, or both. Current medical literature contains reports of therapeutic benefit from various other antiinflammatory and newer antimetabolic agents. Other "specific" medications are sometimes used to combat what is thought to be the causative organism in a specific case.

Recent progress in the medical therapy of uveitis has been unimpressive, although millions of dollars are being spent on laboratory investigation of this group of disorders. Some of the most interesting new work concerns the role of "autoimmunity" in uveitis. Autoimmune diseases are conditions in which the body becomes sensitized to components of its own tissues. Sympathetic ophthalmia — the condition in which an uninjured, normal eye becomes inflamed as a result of an injury to its fellow eye — has been suspected of involving autoimmunity, to account for the sympathizing reaction in the second eye.

This fortunately rare form of uveitis ensues only after an injury to one of the pigmented tissues of the uveal tract. Two weeks or more thereafter (if the injured eye has not been removed), the second eye may develop uveitis; and unless corticosteroids are used promptly and over a prolonged interval, the previously normal eye may lose its sight entirely. The pathogenesis of sympathetic ophthalmia remains obscure, but there are some clues which lead to the suspiciion that it is a disorder of autoimmunity precipitated by uveal injury.

H. OTHER CAUSES OF BLINDNESS

Many forms of blindness have not been mentioned in this short review of current trends in treatment: optic neuritis (as found in cases of multiple sclerosis); disorders affecting the intra-cranial visual pathways (tumors of the brain, or vascular abnormalities such as strokes); the toxic effects of drugs and poisons (such as retinal disease from chloroquine, and optic nerve damage from methyl alcohol); ocular effects of systemic diseases (bleeding disorders, hypertension, arteriosclerosis); and a variety of prenatal diseases that damage the eyes of the unborn infant (such as syphilis, toxoplasmosis, and German measles of the pregnant mother).

Perhaps the last-mentioned category merits further mention. Increasingly, there is evidence that unrecognized and seemingly minor infections of the mother can cause major ocular and other "congenital" abnormalities in the child. The womb is not always the safe, protected, and isolated home that one might naively imagine it to be. Cataracts, retinal degeneration, abnormally small eyeballs, and even congenital glaucoma can result from an unrecognized maternal rubella infection (German measles). Now that the rubella virus has finally been isolated, the hope for immunization to prevent its damage to unborn infants has immediately become more tenable.

In assembled data on the causes of blindness, there is one overwhelmingly large group entitled, "Unknown to Science." Lest the layman be unduly impressed by the ignorance of the ophthalmic profession, it should be pointedly explained that once an eye has been severely damaged, a similar train of events often ensues — such as secondary glaucoma, atrophy of internal structures, cataract, and finally shrinkage of the globe (phthisis bulbi). It is then often impossible to determine the initiating cause of the eye disease, which might well have been identified in its early stages. Nevertheless, there is a great deal which is still unknown to science.

I. VISUAL REHABILITATION

It is a myth that reading in poor light, or holding a book too close, will damage the eyes — although either can produce "eye-strain headaches." The same is true of reading aids for the partially sighted: these devices require the eyes to be close to the printed page, and sometimes this is done at the expense of good reading light. The point is that the eye can not suffer structural damage as a result of its use (any more than the ears can be harmed by too much listening); and there is no reason that a partially sighted patient should not use whatever vision he has to his best advantage.

Reading aids produce magnification that is often sufficient for a person who is legally blind to read remarkably small print, but at the expense of reducing the field of vision and requiring that the head be held close to the page.

This generalization is only partially modified by the fact that specially designed lenses give wider visual angles without decrease in magnifying power.

Elaborate and expensive machines (even incorporating television screens) have been designed in past years to afford marked enlargement of print so that "blind" persons can read. Usually it is the simplest magnifiers which are most useful and popular. Probably few partially-sighted persons realize that reading aids should be professionally prescribed, custom-fitted for each individual — based on his vision, his visual field, his work requirements, and his idiosyncrasies. Although a few reading-aid types are favorites, there are actually dozens to choose from.

J. CONCLUSION

In this chapter, current concepts in the treatment of some of the major types of blindness have been briefly discussed. I hope that the reader will be as impressed by how much has been accomplished as by how much remains to be discovered. If one ponders our ignorance of the treatment of numerous "mysterious" disorders, one should also recall the history of such diseases as retrolental fibroplasia or ophthalmia neonatorum to realize how blinding mysteries can at times be solved.

There are thousands of persons for whom blindness must be accepted as permanent. With exceptions such as cataracts, the chances of treating most long-standing cases of blindness are very slight. Prevention is the key word throughout these discussions; treatment is second best. Actually, clinical studies of blinding diseases started only a century ago, when the ophthalmoscope was invented. Now, with newer techniques — such as the use of radioisotopes, exfoliative cytology, electron microscopy, hyperbaric chambers and ultra-sound — new information is being rapidly produced and will eventually be assimilated into new understanding.

The eye is an organ which can not be easily biopsied; many human diseases of the eye have no animal equivalents; this makes experimental work more difficult. But science is in an age of acceleration, and ophthalmic research work is nurtured by a host of organizations, including tremendous assistance from government grants.

Future progress for the ophthalmologist and fellow workers concerned with blindness depends upon continued study of the pathogenesis of each disorder, enlightened search for better methods of treatment, genetic counseling where hereditary diseases are concerned, and optimal rehabilitation for those whose blindness can not be prevented.

For those whose work does not involve actual scientific endeavors, the responsibility is no less strong. It is superfluous to point out that the care of disease has many facets beyond the doctor's office.

Even though our current knowledge of blindness is quite incomplete, it has been said that, with present skills, at least half of the existing cases of blindness could have been prevented. The work for all of us is clearly laid out.

PERFORMANCE TESTS OF INTELLIGENCE FOR THE ADULT BLIND:* A Comparison of Three Measures

by Mary K. Bauman and Susan C. Mullen

Few developments in the behavioral sciences have had so vast an effect, touched the lives of so many people, as the measurement of "intelligence."

For more than half a century books and journals have been filled with arguments over the definition of intelligence, experiments on how to measure it, and studies of its relationship to just about every other aspect of human behavior. Regardless of disagreement concerning definition, there seems to be much evidence that the information produced by the "intelligence" tests is valuable in many aspects of understanding and working with people and especially in educational and vocational planning and counseling.

Yet we must concern ourselves somewhat with the matter of definition. This report relates to performance tests for blind persons; it seems necessary to clarify what we mean, and perhaps even more what we do not mean, by performance tests.

Confusion In Terminology

Unfortunately, a number of writers of some note have failed to use this term with clarity so that the layman or relatively inexperienced student can scarcely be blamed for confusion in terminology. Perhaps a brief review of the background of the present performance tests will help.

Very early in the study of human abilities, samples of behavior were related to intelligence or what might better be called general mental ability. Binet pulled together a number of such samples into a scale which related mental age (measured by the samples on which the individual succeeded) to chronological age and resulted in the intelligence quotient, or I.Q. At lower age levels Binet and his American adapter, Terman, used some items which involved activity or the use of concrete materials; but most of the items were verbal.

The success of the various forms of the Binet test is well known, but there was soon a recognition of need for less verbal material to measure the ability of individuals who had not had the opportunity to develop verbal skills, such as very young children, educationally deprived persons, persons with foreign language background, or deaf persons. Several early workers in this field developed formboards of varying complexity to meet this need.

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Then there also seems to have been a growing realization that such performance or concrete materials test could reach, even in a person with normal verbal skills, abilities not tapped through words. To obtain information about these non-verbal abilities, Lightner Witmer devised and adapted three tests of varying difficulty and developed norms by age and grade for levels from pre-school to beginning high school. Similarly, Grace Arthur[1/] developed and revised a point scale of performance tests.

Intelligence Into Three Types

The importance of these measures was given theoretical support by the work of E.L. Thorndike[21/] who divided intelligence into three types: (1) abstract, largely measured by the verbal materials, (2) concrete, measured by the performance tests under discussion, and (3) social, for which no really good measure has ever been developed. Other theorists such as Spearman[19/] and Thurstone[22/] agreed upon a breakdown into factors of special abilities (plus, in Spearman's case, a "g" factor) but were less clear in pointing up the importance of concrete materials; they usually satisfied their need for non-verbal content through diagrammatic or picture material in printed form. Wechsler[27/] gives a good bit of credit to Alexander for his own decision to include measures of concrete as well as verbal content and there is no doubt that the success of the various Wechsler scales, in practical application, was a major influence in establishing the importance of "performance" tests.

Tried to Keep them "Culture Free"

Great as the differences in item content were, all these tests sought to evaluate the ability to perceive similarities and differences, to see relationships, to develop concepts, to solve problems, to integrate parts into wholes, to apply rules, to profit by experience and therefore to learn.

It was also generally characteristic of these tests that an effort was made to keep them "culture free," that is, to measure aspects of mental ability which would be little affected, certainly not largely dependent upon, schooling. This was far more true for "performance tests" than for the various verbal scales which definitely sample such academic items as vocabulary and arithmetic. Thus it might be claimed that the performance tests evaluated a native ability to a greater extent than did the verbal tests.

Frequently, though not invariably, performance scales required the manipulation of materials, but the emphasis was always upon the problem solving, the concept development. Unless the individual was actually handicapped with regard to use of his hands (a spastic for example) his score was very little affected by dexterity. Most subjects require far more time to decide where to move the parts than to perform the actual movement.

The performance scale as it appears in the Wechsler and as it will be discussed in this paper in relation to blind persons is, then, a test of mental operations in the broad or general sense implied by such terms as "intelligence," "learning ability," or "general mental ability." It is not a measure of manual dexterity, of sheer speed of manipulation on an assignment requiring no problem solving or development of concepts. The performance scale should therefore be clearly differentiated from such tests as the Purdue Pegboard, the Minnesota Rate of Manipulation, the Penn Bi-Manual or the Crawford Small Parts Dexterity. These latter tests have been shown, in many industrial studies (Bingham,4/ Tiffin24/) to relate to success on repetitive manual jobs but they show little or no relationship to success in schooling.

It is also important to differentiate the performance scale from the tests of mechanical aptitude of which there are a number in both printed and concrete form. The mechanical aptitude test presents a number of basic mechanical principles or samples of types of mechanical relationships. Excellent examples of mechanical aptitude tests in printed form are the various forms of the Bennett tests, or the Mechanical Reasoning Subtest of the Differential Aptitude Battery. Less frequently used are mechanical aptitude tests in concrete form such as the Stenquist. These tests usually have some positive correlation with performance skills but their intent is to measure what Thurstone would designate as one of the special abilities, mechanical comprehension, while the performance scale seeks to measure problem solving and learning ability of a more general, non-specialized nature.

Performance Tests for Blind Persons

Early efforts to measure the general ability or intelligence of blind persons were completely in verbal form. The Hayes-Binet resulted from a deliberate selection of purely verbal items, with omission of all non-verbal content, from forms L and M of the Binet. With blind adults the various Wechsler Verbal Scales were used, while the Wechsler Performance Scales were, of course, omitted because none of the tests could be done without some vision. Many workers with the blind expressed regret at the limited and completely verbal character of psychological information thus made available, a regret which was all the greater because there are several reasons why Verbal I.Q.'s might be less truly representative for blind than for seeing persons. Cutsforth5/ and others felt that many blind persons developed a pseudo verbal skill which might inflate Verbal I.Q.'s, a show of prowess with words which covered very bare and limited concepts. On the other hand, until rather recently, many blind children were neglected in school, consequently dropped out early and might correctly be called educationally deprived. As a result their Verbal I.Q.'s were likely to be lowered, and therefore to underestimate their true ability.

It is true that in the years just before World War II both Hayes9/, in Massachusetts, and Stephenson Smith, in Washington, did some experimental work toward developing a performance test but their results did little more than whet the appetite for concrete materials; no finished tests were produced.

At the 1947 convention of the American Association of Workers for the Blind, Bauman2/ reported on a non-language learning test which has, since that time, been used by her and by a small number of psychologists trained by her or influenced by her work. This is specifically designed to measure the subject's improvement, through three successive trials, in ability to follow rules, ability to work with moderately complex form relationships, and therefore ability to develop concepts in concrete form. In the hands of skilled persons, it can make a great contribution to understanding of abilities which the Verbal I.Q. is quite incapable of reaching. However, Bauman has always spoken of this as a clinical instrument, rather than a test, implying that the observations of a trained examiner are far more important than speed scores. In part, this is because small amounts of residual vision can greatly affect test results and no way was ever found to translate visual differences into reliably differentiated norms.

A number of efforts have been made to adapt the Kohs Design Blocks which are, of course, also a familiar subtest of the Wechsler Performance Scale. The ease with which the color differences of the original blocks can be translated into tactual differences seems to have great appeal.

In 1956, Wattron[26/] reported the results of a Master's Thesis study in which he adapted the Kohs material by roughening sections of wooden blocks. He developed problems of increasing difficulty similar to those of Kohs and tested 20 blind subjects. He found a Spearman rank-difference correlation of .84 with Hayes-Binet I.Q. and concluded that this material offered enough promise to warrant further study.

In Japan, Ohwaki[14/] adapted the Kohs Blocks by covering them with fabrics and he has developed extensive norms on the Japanese population. Currently, Sakata and Sinick[15/] are including the Ohwaki blocks in a battery of tests from which they propose to develop a performance scale. Other items in the Sakata-Sinick Scale are embossed tests of spatial relations, a peg-board, and the O'Connor Wiggly Block (a three dimensional test which was popular during World War II). They state that preliminary work has been done with these materials.

In 1952, MacFarland[12/] reported on the use of mazes and concluded on the basis of his exploratory work that the maze procedure might be a valuable measure of learning ability, but he did not actually attempt to develop this into a test in the formal sense. For some years, Newland[13/] has been discussing possible items of a performance test, but he has evidently not found opportunity to make it a reality. In a publication as recent as December 1964, he again describes possible items but only as illustrations of symbolic thinking. Earlier in 1964, Foulke[6/] described a very interesting and novel approach to use of concrete materials. One of the contributions of his test is that it is apparently designed for relatively young children, an age level for which so few materials are available at present. However, his report also shows only preliminary study with 30 children and it is not clear whether he plans to continue the work or whether he regards his material as capable of extension to use with older subjects. Anderson made very ingenious copies of the Raven Progressive Matrices in tactual form but abandoned the project when he found so high a correlation with the WAIS Verbal Scale that almost no new information was gained by this very time-consuming adaptation.

Fortunately, it is possible to report that two projects, both supported by grants from the Vocational Rehabilitation Administration, have reached completion and as a result three new measures are available, along with instructions for their use and data to aid in their interpretation. The study reported in this paper is a comparison of these three measures. Since very full descriptions of these tests are available (7, 8, 10, 11, 16, 17, 18, 20, 23) we will include here only the minimum information necessary to understanding this study and the resulting comments.

Haptic Intelligence Scale

Between 1954 and 1956 H.C. Shurrager, P.S. Shurrager and S.B. Watson worked on the development of a five-test scale which they called the Performance Scale for the Adult Blind, which was reported in Watson's dissertation.25/ Their results were sufficiently encouraging to lead to support for a larger project which, after some changes in items, has resulted in a six-test scale designated by the name Haptic Intelligence Scale for the Adult Blind.18/

Although they disclaim any aim precisely to adapt the Performance Scale of the Wechsler, four of their subtests, in tactual form, resemble the Digit Symbol, Block Design, Object Assembly, and Picture Completion tests of the Wechsler Performance Scale. Their fifth test, the Pattern Board, consists of a square board with 25 round holes in rows of five. By inserting pegs into certain holes, the examiner forms a pattern around a fixed center peg, allows the subject to examine this pattern, then removes all but the center peg and asks the subject to reproduce the pattern from memory. Their sixth test, called Bead Arithmetic, involves use of an abacus; the subject is taught the basic principles of its use, then is asked to do simple problems on it.

To facilitate use of this scale in conjunction with the WAIS Verbal Scale, normative data is based on age categories and statistical treatment patterned on the WAIS. Their normative group is made up of 700 blind persons varying in age from 16 to 64 years, 100 in each of the age categories used by Wechsler for his WAIS norms. By careful selection they managed to have each age group exactly divided between male and female subjects and the maximum variation in mean WAIS Verbal I.Q.s, from group to group, is less than one point. At each age level subjects were also carefully chosen from the northeast, north central, southern, and western sections of the country to duplicate the proportions of the general population in those areas, with concern for the typical rural-urban balance of that section. Other descriptive information concerning the normative sample, detailed in the HIS manual, suggests that it is closely representative of blind persons of employable age. The authors of the test are to be congratulated both for the obvious effort on their part to obtain a representative sampling and for the fullness with which they report the descriptive information.

Because even small amounts of vision (within the definition of legal blindness) markedly change responses to the test items, an effort was made to limit the normative group to totally blind subjects, and in cases where some useful vision existed the subject was blindfolded. Consequently, the manual states that "there are no norms for the partially sighted and the exercise of useful vision invalidates norms established with the totally blind."

There is a suggestion that, in the hands of an experienced examiner, useful information might also be obtained regarding partially sighted persons.

Test-retest and odd-even relationships for the individual tests vary from .70 to .94 and would generally be regarded as adequate. Intercorrelations of the HIS subtests are fairly high, suggesting that while each measures some unique element, there is also a relatively large common factor. Similar high intercorrelations were found among manual dexterity tests by Bauman[3/] and there is some reason to believe that tactual, orientation and other factors increase this weight of common elements measured for blind persons, compared with sighted subjects.

Correlation of HIS tests and total score with WAIS total Verbal scores are a little lower than the correlations of WAIS Performance with WAIS Verbal results for seeing persons. In other words, the two WAIS scales may be measuring more common factors than are the HIS and WAIS Verbal scales.

VISAB and TRP

In an interesting combination of doctoral projects at Purdue University, under the direction of Tiffen,[23/] two separate tests were developed by Jones and Gruber. These have been given detailed analysis, and manuals have been developed for them by Teare.[20/]

Jones' test, called the Vocational Intelligence Scale for the Adult Blind (VISAB), consists of 43 series of geometric patterns in raised form. For each series the subject is asked to identify the one least like the other three. The similarity of this to certain printed tests, such as the SRA Non-Verbal Form, is obvious.

Gruber's test, called the Tactual Reproduction Pegboard, asks the subject to reproduce on one half of a metal pegboard the patterns constructed by the examiner on the other half of the board. The subject may refer to the sample as frequently as he wishes. Both accuracy and rate of placement are scored.

Statistical studies are based on between 500 and 600 people, between ages 20 and 50, from several centers in the middle west and from New York City. Individuals were described as competitively employed, sheltered shop employees, unemployed, agency personnel and vending stand workers. A rather heavy loading of the population with sheltered shop workers reflected the origins of this project in a request by the National Industries for the Blind for assistance in understanding their workers.

Among validation criteria were supervisory ratings for the sheltered shop employees, grouping into levels of competitive employment, etc., salary, and a job hierarchy which rated vocational achievement on a scale from professional to the routine labor levels.

The authors report a correlation between VISAB and WAIS Verbal I.Q. of .63, while the correlation between TRP and WAIS Verbal I.Q. is .39. Validity studies resulted in some contradictions, but the authors claim that while the WAIS Verbal I.Q. proved generally the best overall predictor of success and correlated best with the salary and job hierarchy criteria, the performance tests were better predictors of success in repetitive manual tasks and related best to the supervisory rating criterian.

Again, excellent background information with regard to the normative groups is provided and validity and reliability information is satisfactory.

Norms are provided in terms of employment groups, vision groups (80-90% loss, 91-99% loss, and L.P.-Total), and age of onset.

The Comparative Study

This study was motivated by very practical considerations. When new test material promises additional understanding of clients, the responsible professional worker will naturally wish it added to the test battery. However, limitations in both examination time and the energy of the client make the addition of all three of the above tests impossible when the basic battery for the examination of blind clients is already lengthy. Some choice must be made.

It was therefore agreed by some of the state agencies served by the Personnel Research Center that we should administer the three new tests to clients already examined with our standard battery, and upon whom reports had already been written. This would make it possible to determine what, if anything, the new tests added and might make it possible to choose among them. Since the standard battery includes the Non-language Learning test, this procedure would also make possible a comparison between its results and the new tests.

Procedure for this study therefore involved:

1. Selection by the agencies of clients to be given the additional tests. This selection was largely on the basis of availability; that is, the client's case was still active. Some additional persons were included in the statistical study when opportunity arose to test applicants for certain forms of training where the performance tests seemed particularly relevant; this latter group of college level individuals pulled the mean for the WAIS Verbal I.Q. up to 111.11 (SD 14.9). Subjects varied in age from 16 to 54 years with a mean of 28.6 (SD 9.5). To avoid differences resulting from varied amounts of vision, only persons without useful vision were included.

2. Administration of the three new tests and interpretation by the psychologist.

3. Meetings with the agency staff who compared what they had learned from the original psychological reports and the new information, to evaluate what was gained from the three new tests.

4. Statistical study of the three tests and of relevant relationships among the quantitative data.

5. To obtain a less biased evaluation, a psychologist with long experience in the interpretation of data for blind persons, but with no connection with the Personnel Research Center or the state agencies, was asked to compare the test results and reports from the original examination, using the basic battery, and the data from the three new tests.

Only item 4 will be reported in detail here. Table I shows the intercorrelations of the three new tests and their relationship with WAIS Verbal I.Q. for our population. As we worked with this material, we became interested in the possible relationships among the tests if the effect of WAIS I.Q. were held constant; Table I also shows the results of these partial correlations. For the VISAB and TRP our correlations approximate those reported by the authors (if we compare our WAIS-TRP correlation with that reported by Gruber for his low vision group). Our data yields a much lower correlation between HIS and WAIS than is reported by Shurrager. We are at a loss to explain this although our population obviously differs from hers in at least two ways: the greater percentage of persons with high WAIS Verbal I.Q.s and the fact that all of our clients were without vision as a result of natural causes whereas some of hers were blindfolded. The somewhat lower partial correlations show that the quality measured by WAIS Verbal I.Q. does have some effect, especially in the relationship between VISAB and TRP. What stands out, however, is the fact that all three of the performance tests have a great deal in common.

Casual observation suggested that it might be interesting to study the relationships of our tests with the WAIS Arithmetic subtest, the Penn Bi-manual Assembly (a measure of manual dexterity), and age. These results appear in Table II. The most interesting thing here is the strong relationship between Arithmetic and TRP, and this was supported by our observations since it was obvious that, in most cases, clients handled this task by counting holes in each direction; those who could readily manage these numerical relationships had a great advantage. All of the tests have a moderate element of manual dexterity, although further study would be required to determine whether this is dexterity, in the usual sense of that term, or whether it measures also the elements of orientation in a work space, tactual discrimination, etc., so important to the blind client. There is very little relationship with age, but younger persons have a slight advantage on the VISAB and TRP; since HIS norms are based on age, it was not included in this section.

Table III shows the correlations of VISAB and TRP with the various HIS subtests. Fairly strong positive relationships are evident as might be expected since the HIS total correlates so strongly with VISAB and TRP.

Correlations of the three performance tests with the total score of the Emotional Factors Inventory, and with the Mechanical, Computational and Scientific scales of the Kuder Preference Record are all insignificant. Curiously enough, however, the correlations with Computational interest are consistently higher than the others (HIS .33, VISAB .27, and TRP .32) again suggesting some relationship with numerical functions.

TABLE 1. CORRELATIONS (PEARSON R) BETWEEN WAIS VERBAL I.Q., HIS I.Q., VISAB AND TRP SCORES (N - 50)

				With WAIS constant	
	HIS I.Q.	VISAB	TRP	VISAB	TRP
WASI I.Q.	.44	.58	.66		
HIS I.Q.		.76	.80	.68	.76
VISAB			.63		.49

TABLE 2. CORRELATIONS (PEARSON R) OF PERFORMANCE TESTS WITH WAIS ARITHMETIC, PENN BI-MANUAL ASSEMBLY, AND AGE.

	WAIS Arith.	(N)	Assembly	(N)	Age	(N)
HIS I.Q.	.20	44	.65	43		
VISAB	.29	39	.49	42	-.22	57
TRP	.56	43	.42	43	-.29	57

TABLE 3. CORRELATIONS (PEARSON R) OF VISAB AND TRP WITH HIS SUBTESTS (N-56)

	Pattern Board	Block Design	Object Assembly	Object Completion	Digit Symbol	Bead Arithmetic
VISAB	.80	.75	.63	.56	.62	.68
TRP	.73	.68	.49	.42	.72	.71

Discussion

Although we have learned something about what these tests have in common, it is also clear that each has some unique qualities and the decision regarding which tests, and how many tests, shall be used will depend upon the purpose of the testing. If we are seeking information as different as possible from that provided by the WAIS Verbal Scale, we can best find it through use of the HIS. However, much further study will be required before we shall be able clearly to relate the HIS I.Q. with success in various jobs. Also, the fact that the HIS provides norms only for persons without useful vision limits its value to work with no more than a third of the clients of most agencies.

The varieties of normative data made available by Teare for the VISAB and TRP greatly enrich their usefulness. However, in actual practice we found that some clients, and especially those in the lower ability levels, simply could not comprehend these two tests and they expressed so much frustration with them that it became necessary to abandon testing to avoid such a breakdown in rapport that the client could accomplish nothing more with us. This is one reason for the heavy weighting of persons with high Verbal I.Q.s in our study.

The HIS material seemed much more acceptable to persons of all I.Q. levels and the variations in tasks, moving from one subtest to another, held interest and increased motivation, whereas individuals who began having trouble with the VISAB and TRP seemed to lose motivation even when not so frustrated that they could not go on at all. Also, the variety of tasks in the HIS gave the examiner a wider opportunity to observe the client meeting different problems and reacting to different stimuli; therefore qualitative notes on the examination were much richer.

It has already been noted that this study included evaluation of new information obtained from the three performance tests, both informal evaluation by agency staff and more formal evaluation by a colleague not otherwise associated with the project. Neither evaluation can be put into any numerical form since, despite efforts to the contrary, it might include some bias, and it is important to remember that the results of the new tests were measured against reports which included use of the Non-language Learning Test. Both the staff and colleague evaluations indicated minimal gains from the new tests; however, we all strongly feel that this would not have been true had the Non-language Learning Test not been part of the original battery. We feel that any or all of the new tests would add greatly to the information available to a psychologist who, up to this time, has used no concrete measure of general ability.

Summary

1. Against a brief background discussion of performance tests, three new measures are described, the HIS, VISAB, and TRP.

2. These three tests were studied, using a population for which results of a standard battery of tests were already available.

3. Correlations with WAIS Verbal I.Q. varied from .44 to .66, while intercorrelations among the three tests varied from .68 to .80. Some positive relationship was found between all HIS subtests and the VISAB and TRP. Positive relations are also found between the three performance tests and a measure of manual dexterity. Relationships with WAIS Arithmetic are minor except for TRP where the r is .56. Relationships with age, Kuder Mechanical, Computational and Scientific scores, and the Emotional Factors Inventory are low.

4. Advantages and disadvantages of the several tests are discussed.

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THE BLIND IN A CHANGING WORLD

THE EXTENT, CAUSES AND DISTRIBUTION OF BLINDNESS

A Statistical Survey

by John Wilson

Director, Royal Commonwealth Society for the Blind, London

(A paper presented to the World Assembly of the World Council for the Welfare of the Blind, New York — July 31, 1964.)

It is an astonishing fact that, during the five years since this Assembly last met, the world's population has increased by 300 million. In the fourteen days of our conference another four million will be born.

The pace is accelerating. By 1975, the world's population will have reached 4,000 million and shortly after the close of this century it should reach 6,000 million. One enthusiastic mathematician has calculated that, if we go on at this rate, by 2,700 A.D. there will be only one square foot of the earth's surface for every individual.

Number of Blind — 14 Million

Nobody knows how many blind people there are in the world today. All that is possible is to make an intelligent guess on the statistics which are available, and this was how the World Health Organization, in 1962, produced its minimum estimate of 10 million.

To avoid constant repetition, I will use the phrase "blindness rate" to mean the number of blind people per 100,000 of the general population. Thus, on the world's present population of 3,200 million, the W.H.O. estimate works out at a blindness rate of 320. That estimate was based on minimum figures and deliberately ignored the fact that many countries count only the totally blind. If an internationally acceptable definition of blindness had been used, the figure would have been much higher. Throughout most of Asia, a blindness rate of 500 would be more realistic and, in tropical Africa, at least 700. I believe that a blindness rate of 450 would be nearer the truth as a world average, and that would give a total of 14 million blind people.

The guess-work becomes even more approximate as we look to the future. Nuclear wars apart, the growth of the general population is reasonably predictable. What is much less certain is our capacity to reduce the proportion of that population which will be blind. It is a race between the mothers and the doctors and, for the present, the mothers are winning. It should however be possible to analyze the main factors which will control the situation and this I will attempt to do.

People are living longer. Today, a twenty-year-old Indian can expect to live until he is sixty-three; his father would have been lucky to have lived into his fifties. This lengthening of the life span is happening over much of the world and must have a considerable effect on the world's blind population because the risk of blindness increases sharply with age.

Aging Factor in Britain

In Britain, where the general blindness rate is low (207), the rate amongst people over seventy is 1,640 (about equal to an area heavily affected with trachoma), and the rate amongst people over eighty-five is 5,750, a figure which would not be out of place in the worst "river blindness" area. Mainly because of the aging of the population, the number of blind in Britain has continued to increase at a time when the blindness rate in most other age groups has been progressively reduced; two-thirds of the British blind are now over sixty-five years of age.

This age factor has not yet had its effect on the blindness statistics in most of the countries of Africa and Asia. A recent survey in Northern Rhodesia showed that only 12% of the blind were over sixty years of age. The reason must be that, previously, only a small fraction of such population survived into the upper age groups in which cataract and glaucoma are most prevalent. A critical change is now taking place and with each decade an increasing number of Africans and Asians will survive into their sixties and seventies. There is no reason why they should be insulated from the ophthalmic consequences and, indeed, the evidence is that cataract is not only more prevalent in Asian communities but also that it occurs at an earlier age than in the West. In the massive populations concerned, even a small change in the age pattern could have a startling effect on the number of the blind.

But the main reason for the world's population growth is the improved survival rate among children. As a country's health services advance from a primitive to a transitional stage (which is what is happening over much of the world at present) the death rate per thousand of children under four years drops from about 250 to 70. This is the force which has detonated the population explosion and it has already produced astonishing results. In India, there are 170 million children below fourteen (38% of the population); in Ghana it is 40%; in Mexico 41%. Every day, throughout the world, 300,000 children are likely to be born and their chance of survival is spectacularly better than ever before. As they themselves reach the age of parenthood the growth of the population will accelerate from arithmetical to geometrical progression. This is the age group which most concerns workers for the blind and the question which we must ask is what fraction of this exploding child population will be blind.

More than 600,000 Blind Children

At the time of the Oslo Conference, by the simple process of totalling the figures returned by the various countries and by using them to strike an average for countries which did not make returns, I estimated that the minimum number of blind children of school age was 660,000. Much has happened since 1957 and it now looks as though the figures on which that estimate was based were in many cases too low. The Government of India, for example, has recently estimated that there are 400,000 blind children in that country.

This seems an incredible figure but, whilst in New Delhi last year, I had the benefit of seeing some of the samples on which it was based and they are most impressive. There is too little information to justify an international estimate, but it is a chilling thought that, even if the world's blindness rate amongst children were no higher than the present level in the United States (and it must obviously be much higher), there would today be more than 600,000 blind children in the world.

As health services improve, child blindness decreases, but the big question is whether the reduction will be fast enough. In a predictable period of years, the number of children in the world will double; unless, during that same period, the blindness rate amongst children halves, the total number will not fall. Put another way, unless we are as efficient at preventing the causes of blindness as we are at preventing the causes of death, the position will get worse. We have to gallop in order to stand still.

Hereditary Causes Disturbing Fact

In countries with advanced medical services there is good reason for optimism. In England in 1962, the blindness rate amongst children was 21. Despite a steady increase in the general birth rate, the number of blind children has continued to fall and is now lower than ever. The same is true of other countries with a similar standard of medical services. One disturbing fact is that blindness from hereditary causes is assuming greater significance. Children with these conditions have a better chance of survival nowadays and, if they not only survive but become parents, they will cast a long shadow into the future. However, that problem is being energetically tackled and it is reasonable to expect that in the advanced countries the number of blind children will continue to decline though the proportion with secondary handicaps will increase.

But what happens in such countries can have only a marginal effect on the world picture. Nearly three-quarters of the world's population lives in Asia, Africa and Latin America and it is in those areas that the critical equation will work itself out.

In such countries, not only is the population growing more swiftly but the blindness rate amongst children is much higher. In India, if we accept the Ministry of Education's estimate, the rate is 235. Surveys indicate that in areas where 80% of the population has trachoma — and that is fairly common in Africa and the Near East — 1% of the children will probably be blind. This figure has recently been recorded in a survey in Southern Arabia. In the Luapula Valley of Northern Rhodesia (though fortunately this is a freak figure) it was found that 82% of the blind lost their sight in the first ten years of life. If such figures were projected into the next few generations the result would be appalling, but we need not take such a pessimistic view.

Some of the causes of infant mortality, notably smallpox, are also major causes of child blindness and their control is an unmixed blessing. Trachoma, conjunctivitis, measles, gonorrhoea and leprosy can now be controlled and, if we have the will to match our skill, a great reduction can be made in these giant dieases which have destroyed the eyes of children from the beginning of human history; but, as these giants dwindle, it is becoming increasingly evident that the centre of the stage will still be dominated by the massive spectre of malnutrition.

W.H.O. Presents Grim Document

During the past three years, consultants of the World Health Organization have made an international survey of xerophthalmia, the eye condition associated with vitamin A deficiency. In its advanced form, keratomalacia, this is a direct cause of blindness, but by far the most serious effect of vitamin deficiency is that it predisposes children, particularly in the months immediately after weaning, to blindness from causes which would not destroy a well-nourished eye. The report of the W.H.O. consultants is a grim document; it shows, with a mass of supporting evidence, that this is a major health problem throughout the world, being particularly serious in the highly populous areas of Asia, Africa and Latin America. In Dacca, a city with half a million inhabitants, two eye hospitals in a single year recorded 259 children blinded by keratomalacia. In Indonesia, where xerophthalmia is one of the most prevalent maladies amongst infants, it was found that 8% of children with this condition had lesions which would cause blindness.

The Food and Agricultural Organization has estimated that about a third of the world's population lives on a diet chronically deficient in protein and essential vitamins. In such communities, the blindness rate is usually high, but it would be much higher were it not for the fact that children with keratomalacia often die. In Indonesia, it was observed that about half the children with xerophthalmia die in the first few years of life; the death rate amongst children with keratomalacia is probably even higher — one authority put it at 80%. Today, however, it is often possible for emergency treatment to save the life, though not the sight, of such children. This is a most welcome advance but, in the massive populations concerned, even a modest improvement in the survival rate could cause a startling increase in the number of blind children.

Diet Improvement Sole Sure Answer

The conclusion seems to be that, unless nutrition can be improved or the ocular effects of malnutrition controlled, the blindness rate amongst children over much of the world will not fall below the critical figure necessary to balance population growth. Experiments are being made with the use of massive doses of vitamin A, but the only sure answer is a permanent improvement in diet. This is a task for agriculturalists. Community Development workers, and teachers and perhaps, as Dr. Cicely Williams has said, the problem will be solved only when a different view prevails of the value of child life.

Control of trachoma and river blindness (onchocerciasis) is now as much an administrative as a medical problem. Techniques of prevention will doubtless continue to improve, but already any country which is determined to do so could control these scourges. It is a question of the priority which is assigned to the task, and that largely depends on the extent to which the public's conscience is stirred.

In any country, the prevalence of blindness from glaucoma and cataract is related to the number of eye specialists able to do the necessary surgery. In the United States there is one eye specialist to every 30,000 people; in Northern Nigeria, there are four specialists to 30 million people. There is an acute shortage of eye specialists in the countries which most need them and, unless something decisive is done to increase training facilities and to induce ophthalmologists to work in rural areas, a great burden of needless blindness will be passed on to the next generation.

CONCLUSIONS

There are too many uncertainties in this situation to warrant any dogmatic conclusions. However, on the facts so far as I have been able to ascertain them, I believe that the following trends are likely:

1 — Amongst that minority of the world's population which enjoys advanced medical and social services, the blindness rate is likely to continue to decrease until it reaches about 200. It may go lower in populations with a low average age. The proportion of old blind people will rise and the number of blind children should continue to fall until the hereditary causes become the decisive factor.

2 — Amongst the three-quarters of the world's population which lives in Asia, Africa and Latin America, we should expect a steady, and in some places a sharp increase in the number of old blind people. The blindness rate amongst children should go down but, because of the accelerating growth of the child population generally, the actual number of blind children is unlikely to fall. The critical factor is malnutrition and, unless its ophthalmic consequences can be controlled, the blindness rate amongst children is unlikely to fall fast enough to balance the growth of the child population generally. In some areas the results of this could be alarming.

3 – If the world's blindness rate is assumed to be 450, and if that rate is not appreciably reduced, the number of blind people in the world will rise from 14 million at present to 18 million by 1975 and to 27 million by the turn of the century. To maintain the present figure of about 14 million, the blindness rate will have to be reduced from 450 to 350 by 1975 and to 230 by the close of the century. The first of these two propositions seems too pessimistic and the second too optimistic; the truth may lie somewhere in between, in which case, by 1975, we can expect a blind population of about 16 million and, by the turn of the century, about 20 million.

Concern Must Be With Prevention

It is for others in this Conference to indicate how far we in work for the blind are likely to respond to the astonishing challenges of this changing world. To do so significantly we must extend the whole scale of achievement. Where we have thought in hundreds, we must think in scores of thousands; where we have been concerned with single institutions, we must promote whole national systems. In the process, we may have to abandon some of our traditional specialism so that we can gear the advance to those dynamic forces of educational and social betterment which are moving in the world today. We must be concerned with prevention and join with the doctors in giving this effort the momentum of a great international cause.

Professor Toynbee has said that the twentieth century may chiefly be remembered as the age in which men dared to regard the welfare of the whole of the human race as a reasonable objective. That human race contains a growing multitude of blind people. They are not dots on a statistician's chart nor cards in a computer, but people whose welfare is our objective. We will not attain it unless the need of the blind anywhere becomes the active concern of workers for the blind everywhere.

LIBRARY SERVICES FOR THE BLIND

by Robert S. Bray

The present concept of good library service to blind persons calls for a closely-knit program which involves the federal, state, and local governments, volunteer organizations on the national and local levels, and local community service organizations.

General administration, guidance and coordination of the entire program is the responsibility of the Library of Congress, which, through its Division for the Blind, provides books in braille, talking-book records, talking-book machines, and books recorded on magnetic tape, to blind residents of the United States and of its insular possessions, and to American citizens temporarily domiciled abroad.

All Available For Loan

These activities are made possible by an annual appropriation authorized by the act of Congress of March 3, 1931, as amended (2 U.S.C., 135a). On October 9, 1962, Congress passed Public Law 87-765 which established in the Library of Congress a collection of musical scores, instructional texts, and other specialized materials for the use of blind persons. Copies of both acts appear in Appendix I.

The reading materials provided by the Library of Congress are available for loan without charge to persons whose visual acuity is 20/200 or less in the better eye with correcting glasses, or whose field of vision at its widest diameter subtends an angular distance no greater than 20 degrees. These materials are also available for loan to institutions, for the use of eligible persons.

Application for loan of a talking-book machine is made to the lending agency that serves the State where the applicant resides. A list of these lending agencies constitutes Appendix II. The application should be accompanied by a certificate as to the degree of blindness, signed by a physician, ophthalmologist or optometrist. If the applicant is totally blind, a statement to that effect may be submitted by someone well known in the community and will be accepted as certification.

The agency will furnish a machine and forward a registration card to the appropriate regional library, which will circulate talking-book recordings to the reader. A list of regional libraries constitutes Appendix III. Most of these libraries also circulate braille books. Requests for braille books should be made to the library serving the area in which the reader lives.

A small collection of books in Moon type is available on loan from the Library of Congress. Since this embossed type, based on modified letters of the alphabet, is now read by less than 100 persons in this country, it is considered obsolescent and no new material is being acquired.

Books Based on Desires, Needs

The reading tastes of blind readers are generally indistinguishable from those of sighted readers. The books to be embossed into braille or recorded are selected by the Division for the Blind after consultation with advisory committees composed of librarians and specialists. To be considered, current books must be reviewed in national booktrade publications, library periodicals, and leading newspapers, or must appear on best-seller lists or be recommended by readers or specialists.

The final selection of books to be produced is based, as far as funds will permit, upon the desires and needs of the blind readers as demonstrated by surveys of reading preferences, apparent usefulness, and lasting popularity. The high cost of producing braille and talking books in sufficient quantity generally limits the number of titles to those which will meet the widest reader preference, to assure the best utilization of appropriated funds.

Books in press braille and talking-book records are ordered by the Division from nonprofit organizations whose activities are concerned primarily with the blind. These publishers forward the books, when completed, directly to the regional libraries. All libraries receive the same books at the same time so that, as far as possible, blind readers have new books available at the same time throughout the country. Newly released books are listed and reviewed in two bimonthly periodicals, Talking Book Topics and Braille Book Review, which are mailed free of charge to all blind readers. These two publications appear in print and in braille editions.

Often a book will be needed by a reader or student but may subsequently have only a limited circulation. These titles are assigned to volunteer organizations, which will transcribe them by hand or record them on magnetic tape. The contribution of volunteers in producing books of specialized interest is one of the great assets of the program.

Offers Correspondence Course

The Division for the Blind instructs sighted volunteers in transcribing braille through a correspondence course. When qualified local instructors are available, they are called upon to give personal instruction. The Division also offers a correspondence course to train blind persons to become certified proofreaders of braille transcriptions. Both instruction courses are free of charge, but students must provide the necessary supplies and writing equipment.

The story of the development of a national library program for the blind must take into account the early interest and activities of the libraries pioneering in this type of service. As early as 1868, the Boston Public Library established a department for the blind after receiving eight embossed volumes. In 1882, the Pennsylvania Home Teaching Society and Free Circulating Library for the Blind was founded in Philadelphia and in 1899 was incorporated with the Free Library of Philadelphia. The Chicago Library, in 1894, received a collection of Moon books from a local women's club. The New York (City)

Free Circulating Library for the Blind was organized in 1895 by a blind man who had a private collection of embossed books which in 1903 became the nucleus of the Library for the Blind of the New York Public Library. The Detroit Public Library placed 110 volumes on the shelves in 1896, and in the same year New York became the first State to create a department for the blind in a State library. Other State libraries soon followed the example.

The concept of a national library for the blind was developed in 1897 by John Russell Young, Librarian of Congress, when he established a reading room for the blind with about 500 books and music items in raised type.

In 1913 Congress provided that one copy of each book in raised type made for educational purposes under Government subsidy by the American Printing House for the Blind in Louisville, Kentucky was to be deposited in the Library. Other materials were acquired by gift and purchase. Services, too, were expanding: instruction was available for those desiring to learn reading by touch; displays were arranged; and plans were developed for exhibiting products made by blind persons.

In 1930 two bills were introduced in Congress to provide adequate service on a national scale: the Pratt Bill (H.R. 11365) and the Smoot Bill (S. 4030), both of which authorized an appropriation to be expended under the direction of the Librarian of Congress.

Adult Project Began in 1931

The Pratt-Smoot Bill became law on March 3, 1931. The Librarian of Congress was authorized to arrange with other libraries "to serve as local or regional centers for the circulation of such books, under such conditions and regulations as he may prescribe." On the following day a Joint Resolution was passed appropriating $100,000 for fiscal 1932 to carry out the provisions of the Act to Provide Books for the Adult Blind.

The adult blind book project began its operations on July 1, 1931, and gave attention first to the selection of titles to be embossed. The first order was for Woodrow Wilson's George Washington, to meet a demand created by the commemoration of the bicentennial of Washington's birth. The Annual Report of the Librarian of Congress for 1931 stated that "By the middle of September.... 15 titles were selected as an experimental group and contracts for the reproduction of them in Braille, 1-1/2 placed with the four American presses submitting proposals, to wit: American Printing House for the Blind, Louisville, Kentucky; Universal Braille Press, and American Brotherhood of Free Reading for the Blind, Los Angeles; and Clovernook Printing House for the Blind, Cincinnati, Ohio, the experiment including a need of testing out the relative competence of those several presses."

The designation of distributing libraries was less difficult. After consultation with the American Library Association and the American Foundation for the Blind, 18 libraries in addition to the Library of Congress were selected for their ability to give adequate service and regional coverage of the country.

30 Minutes On Each Side

Two important developments occurred in 1933 — the establishment of a uniform system of braille (Standard English Braille) for all English-speaking countries and the development of the talking book. The second development is described as "the recording on a disc of the voice of a good reader, and its reproduction at will through the instrumentality of a reproducing machine or phonograph." Experimentation on the development of sound recordings for the blind had begun many years earlier. Aided by the Carnegie Corporation, the American Foundation for the Blind and the Braille Institute of America had given particular attention to the development of suitable records and reproducers.

Finally, in 1933, the American Foundation for the Blind produced two types of machines — one spring driven, and the other a combination electric radio and phonograph. A durable record was perfected, recorded at 150 grooves to an inch, so that a book of 60,000 words could be contained on 8 or 9 double-faced 12-inch records. The turntable ran at 33-1/3 revolutions per minute, which permitted 30 minutes of reading time on each record.

By 1934, the talking book was developed well enough and the number of reproducers in the hands of blind readers was large enough to justify the use of part of the Congressional appropriation for the purchase of records. The Library's appropriation did not at first include funds for machines; they had to be purchased at a cost of between $35 and $60, either by the blind person who desired to borrow the recorded books, or on his behalf (as was frequently the case) by philanthropic and civic organizations. Among the titles chosen for the first orders of talking books were the Declaration of Independence; the Constitution of the United States; Washington's Farewell Address; Lincoln's Gettysburg Address; Shakespeare's As You Like It, The Merchant of Venice, and Hamlet; Kipling's Brushwood Boy; and Wodehouse's Very Good, Jeeves.

The basic act was amended several times, permitting increased appropriations. The sum appropriated for each of the fiscal years from 1948 through 1956 was $1 million.

Continuing Program of Research

An amendment, approved July 3, 1952, enabled blind children to be included as benefactors under the book program. The authorization was affected by striking out the word "adult" from the first sentence of the act of June 13, 1944 (58 Stat. 276). On September 7, 1957, the act was again amended so that the fixed stated maximum which could be appropriated (at that time $1,125,000) was replaced by "... such sums ... as may be necessary ..." The appropriation for the year ending June 30, 1965 was $2,446,000.

A continuing program of research and development, particularly in the field of sound recordings and playback equipment for such recordings, is a principal activity of the Division for the Blind. Since 1963, after a few years of testing and experimentation, all new talking-book records have been recorded on 10-inch discs at the speed of 16-2/3 RPM. This change materially reduced the weight and size of recorded books, and also affected economies in their production. Studies of disc recordings at 8-1/3 RPM, and of magnetic tape recordings in sealed cassettes specifically designed for use by blind persons, offer promise of making greatly improved library service available to an increasing number of readers. Elimination of the annoyances of scratched records and of an insufficiency of copies to meet peak demands should aid materially in providing greater satisfaction and enjoyment to this country's blind readers.

The ten year period, 1955 to 1964, can be considered one of growth and expansion. The annual appropriation was more than doubled, which enabled twice as many books to be provided in three and a half times as many copies, several nationally known magazines were recorded and embossed, and three new regional libraries were opened. As a result the number of blind persons using the program increased by 70 per cent. Well over three million volumes of braille and talking books were circulated in 1964, and all indications are that the number of both readers and books borrowed will continue to increase.

Present and future plans call for improvement in the quality of service. The past two or three years have brought increased emphasis on close cooperation with public and private organizations which are in a position to offer local, personal attention. Local public libraries are playing an important part in offering personal reader guidance, and blind persons are encouraged to take an active part in community projects such as book discussion groups. To an even greater extent the reading needs of individuals will be considered and every effort made to meet them. Recorded reference works, the use of compressed speech, the indexing of recorded books — these are only a few of the areas now being explored for development in the very near future.

APPENDIX I

Public Law 85-308
85th Congress, S. 2434
September 7, 1957

71 Stat. 630.

AN ACT

To amend the Act entitled "An Act to provide books for the adult blind."

Books for the blind.
46 Stat. 1487.
2 USC 135a.
Appropriation.

Be it enacted by the Senate and House of Representatives of the United States of American in Congress assembled, That section 1 of the Act entitled "An Act to provide books for the adult blind", approved March 3, 1931, as amended, is amended as follows:

"That there is authorized to be appropriated annually to the Library of Congress, in addition to appropriations otherwise made to said Library, such sums for expenditure under the direction of the Librarian of Congress as may be necessary to provide books published either in raised characters, on sound-reproduction recordings, or in any other form, and for the purchase, maintenance, and replacement of reproducers for such sound-reproduction recordings, for the use of the blind residents of the United States, including the several States, Territories, insular possessions, and the District of Columbia, all of which books, recordings, and reproducers will remain the property of the Library of Congress but will be loaned to blind readers under regulations prescribed by the Librarian of Congress for this service. In the purchase of books in either raised characters or in sound reproduction recordings the Librarian of Congress, without reference to the provisions of section 3709 of the Revised Statutes of the United States (41 U.S.C. 5), as amended, shall give preference to non-profit-making institutions or agencies whose activities are primarily concerned with the blind, in all cases where the prices or bids submitted by such institutions or agencies are, by said Librarian, under all the circumstances and needs involved, determined to be fair and reasonable."

Applicability.

Sec. 2. This Act shall be applicable with respect to the fiscal year ending June 30, 1958, and for each fiscal year thereafter.

Approved September 7, 1957.

Public Law 87-765
87th Congress, S. 3408
October 9, 1962

76 Stat. 763.

AN ACT

To establish in the Library of Congress a library of musical scores and other instructional materials to further educational, vocational, and cultural opportunities in the field of music for blind persons.

Be it enacted by the Senate and House of Representatives of the United States of American in Congress assembled, That (a) the Librarian of Congress shall establish and maintain a library of musical scores, instructional texts, and other specialized materials for the use of blind residents of the United States and its possessions in furthering their educational, vocational, and cultural opportunities in the field of music. Such scores, texts, and materials shall be made available on a loan basis under regulations developed by the Librarian or his designee in consultation with persons, organizations, and agencies engaged in work for the blind.

Blind persons.
Library of musical scores.
Establishment.

(b) There are authorized to be appropriated such amounts as may be necessary to carry out the provisions of this Act.

Approved October 9, 1962.

APPENDIX II

LENDING AGENCIES

for the
Distribution of Talking-Book Machines

provided by the
Division for the Blind
Library of Congress

Adult Blind Department
Alabama Institute for Deaf and Blind
P.O. Drawer 17
Talladega, Alabama 35160

Library for the Blind
Seattle Public Library
425 Harvard Avenue East
Seattle, Washington 98102
for ALASKA

Family Services Division
Arizona State Department of Public Welfare
1632 West Adams
Phoenix, Arizona 85007

Services for the Blind
900 West 4th Street
Little Rock, Arkansas 72203

Braille Institute of America, Inc.
741 North Vermont Avenue
Los Angeles, California 90029

Talking Book Library
Florida Council for the Blind
P.O. Box 2299
Daytona Beach, Florida 32015

Libary for the Blind
State Department of Education
1050 Murphy Avenue, S.W.
Atlanta, Georgia 30310

San Francisco Lighthouse for the Blind
1097 Howard Street
San Francisco, California 94103

Services for the Blind
100 West 7th Avenue
Denver, Colorado 80204

Board of Education and Services for the Blind
G-2, State Office Building
Hartford, Connecticut 06115

Delaware Commission for the Blind
305 West 8th Street
Wilmington, Delaware 19801

Columbia Lighthouse for the Blind
2021 - 14th Street, N.W.
Washington, D. C. 20009

Iowa Commission for the Blind
4th and Keosauqua Streets
Des Moines, Iowa 50309

Division of Services for the Blind
State Office Building
Topeka, Kansas 66612

Department of Social Services
Box 339
Honolulu, Hawaii 96809

Services for the Blind
Department of Public Assistance
Boise, Idaho 83701

Community Services for the Visually Handicapped
Room 1713
160 North LaSalle Street
Chicago, Illinois 60601

Indiana Agency for the Blind
536 West 30th Street
Indianapolis, Indiana 46223

Maryland Workshop for the Blind
2901 Strickland Street
Baltimore, Maryland 21223

Division of the Blind
Department of Education
14 Court Square
Boston, Massachusetts 02108

Department for the Blind
Michigan State Library
735 East Michigan Avenue
Lansing, Michigan 48913

Department for the Blind
Wayne County Library
33030 Van Born Road
Wayne, Michigan 48184

State Services for the Blind
Centennial Building
St. Paul, Minnesota 55101

Kentucky Industries for the Blind
2001 Frankfort Avenue
Louisville, Kentucky 40206

Bureau for the Blind and Sight Conservation
P.O. Box 4065
Baton Rouge, Louisiana 70804

Division of Eye Care and Special Services
State House
Augusta, Maine 04330

Service Club for the Blind, Inc.
4312 Olive Street
St. Louis, Missouri 63108

Vocational Rehabilitation for the Blind
515 North Ewing Street
Helena, Montana 59601

Services for the Visually Impaired
State Capitol
Carson City, Nevada 89701

Services for the Visually Impaired
State Capitol
Lincoln, Nebraska 68509

Division of Blind Services
State House Annex
Concord, New Hampshire 03301

State Commission for the Blind
1100 Raymond Boulevard
Newark, New Jersey 07102

Division of Services for the Blind
408 Galisteo Street
Santa Fe, New Mexico 87501

Special Services for the Blind
Room 14
528 North State Street
Jackson, Mississippi 39205

Commission for the Blind
15 Park Row
New York, New York 10038

Social Service Division
State Commission for the Blind
Mansion Park Building
Raleigh, North Carolina 27602

Division of Vocational Rehabilitation
University Station
Box 8117
Grand Forks, North Dakota 58202

Division of Services for the Blind
85 South Washington Avenue
Columbus, Ohio 43215

Services to the Blind
Vocational Rehabilitation Division
State Capitol Station
Oklahoma City, Oklahoma 73105

State Commission for the Blind
1809 North Congress
Austin, Texas 78701

Services for the Visually Handicapped
309 East 1st South
Salt Lake City, Utah 84111

Services for the Blind
128 State Street
Montpelier, Vermont 05602

Virginia Commission for the Visually Handicapped
3003 Parkwood Avenue
Richmond, Virginia 23221

Oregon Commission for the Blind
535 S.E. 12th Avenue
Portland, Oregon 97214

Office for the Blind
Health and Welfare Building
Seventh and Forster Streets
Harrisburg, Pennsylvania 17120

Institute for Blind Children
Box 8622
Santurce, Puerto Rico 00910

Services for the Blind
Building #41
1 Washington Avenue
Providence, Rhode Island 02905

Division for the Blind
Wade Hampton Office Building
P. O. Box 1108
Columbia, South Carolina 29202

Service to the Blind
State Capitol Building
Pierre, South Dakota 57501

Services for the Blind
303 State Office Building
Nashville, Tennessee 37219

Services to the Blind
Division of Public Assistance
2385 North Lake Drive
Milwaukee, Wisconsin 53211

Division for the Deaf and Blind
Capitol Building
Cheyenne, Wyoming 82001

Services for the Blind
3411 South Alaska Street
Seattle, Washington 98118

Division of Public Assistance
Department of Welfare
1800 East Washington Street
Charleston, West Virginia 25311

APPENDIX III

REGIONAL LIBRARIES

Distributing Books

Provided by the

Division for the Blind
Library of Congress

Library for the Blind
New York State Library
226 Elm Street
Albany, New York 12202

Library for the Blind
State Department of Education
1050 Murphy Avenue, S.W.
Atlanta, Georgia 30310

Texas State Library
Austin, Texas 78711

Department for the Blind
Louisiana State Library
P.O. Box 131
Baton Rouge, Louisiana 70821

Services to the Blind
Chicago Public Library
4544 North Lincoln Avenue
Chicago, Illinois 60625

Library for the Blind
Public Library of Cincinnati and
Hamilton County
617 College Street
Cincinnati, Ohio 45202

Service for the Blind
Indiana State Library
140 North Senate Avenue
Indianapolis, Indiana 46204

Library for the Blind
Cleveland Public Library
325 Superior Avenue
Cleveland, Ohio 44114

Talking-Book Library
Florida Council for the Blind
P.O. Box 2299
Daytona Beach, Florida 32015

Division of Work with the Blind
Denver Public Library
90 Lowell Boulevard
Denver, Colorado 80219

Iowa Commission for the Blind
4th and Keosauqua Streets
Des Moines, Iowa 50309

Library for the Blind
Minnesota Braille and Sight Serving
School
Faribault, Minnesota 55021

Library for the Blind
402 Kapahula Avenue
Honolulu, Hawaii 96815

Library for the Blind
Free Library of Philadelphia
17th and Spring Garden Streets
Philadelphia, Pennsylvania 19130

Michigan State Library for the Blind
735 East Michigan Avenue
Lansing, Michigan 48913

Library for the Blind
Nebraska Public Library Commission
State Capitol
Lincoln, Nebraska 68509

Braille Institute of America
741 North Vermont Avenue
Los Angeles, California 90029

Library for the Blind
Milwaukee Public Library
814 West Wisconsin Avenue
Milwaukee, Wisconsin 53233

Library for the Blind
The New York Public Library
166 Avenue of the Americas
New York, New York 10013

Special Services Division
Oklahoma State Library
109 State Capitol
Oklahoma City, Oklahoma 73105

Division for the Blind
Utah State Library
1488 South State Street
Salt Lake City, Utah 84115

Wolfner Library for the Blind
3844 Olive Street
St. Louis, Missouri 63108

Regional Library for the Blind
Division for the Blind
Library of Congress
Washington, D. C. 20540

Library for the Blind
Wayne County Library
33030 Van Born Road
Wayne, Migchigan 48184

Library for the Blind
Carnegie Library of Pittsburgh
Federal and East Ohio Streets
Pittsburgh, Pennsylvania 15212

Books for the Blind
Library Association of Portland
216 N.E. Knott Street
Portland, Oregon 97212

Regional Library for the Blind
North Carolina State Library
Mansion Park Building
Raleigh, North Carolina 27601

Virginia State Library for the Blind
3003 Parkwood Avenue
Richmond, Virginia 23221

Blind Section
The California State Library
Library - Courts Building
Sacramento, California 95809

Library for the Blind
Seattle Public Library
425 Harvard Avenue East
Seattle, Washington 98102

Library for the Blind
Alabama Institute for the Deaf and Blind
P.O. Box 455
Talladega, Alabama 35160

The Library
Perkins School for the Blind
Watertown, Massachusetts 02172

APPENDIX IV

RECORDED PUBLICATIONS

The following periodicals recorded on talking-book records are available from all Regional Libraries for the Blind.

American Heritage (bimonthly) Articles on American History, culture, and civilization.

Atlantic Monthly (monthly) Nonfiction articles on a variety of subjects, fiction, humorous essays, poems, and book reviews.

Braille Technical Press (monthly) Electronics and amateur radio.

Changing Times (monthly) Articles of general interest to consumers on ways to save money, economic outlook, education, and job opportunities.

Choice Magazine Listening (monthly) Unabridged selection of articles from New Yorker, Saturday Review, Reporter, and other outstanding magazines.

Dialogue (quarterly) A miscellanea; articles, poems, and stories.

Ellery Queen Mystery Magazine (monthly) A selection of mystery stories.

Harper's Magazine (monthly) Articles on politics, science, personalities, art, finance, business, and literature; reviews of current books.

Holiday (monthly) Travel, touring, historic places and events.

Jack and Jill (monthly) Stories, puzzles, and articles for juvenile readers.

New Outlook for the Blind (monthly except July and August) Articles of interest to professional workers for the blind.

News of the Week in Review (weekly) From the Sunday New York Times.

Newsweek Talking Magazine (weekly) Recording of the well-known news magazine.

Reader's Digest (monthly)

Senior Citizen (monthly) Articles of interest to the aging.

Sports Illustrated (weekly) This magazine is released every four weeks, with the four issues in a single container.

In addition, a number of periodicals of religious interest are available directly from the publishers.

The Division for the Blind of the Library of Congress has available the following periodicals, recorded on 7-inch reels of magnetic tape at 3-3/4 inches per second, dual track.

Current (monthly) Reprints of articles and speeches on physical and science, national and international problems.

Foreign Affairs (quarterly) Political science and government, with emphasis on foreign policy.

Galaxy (bimonthly) Science fiction stories.

Horizon (bimonthly) Graphic arts, architecture, music, literature, and the theatre.

Kenyon Review (quarterly) Articles, stories, verse, and reviews of current books; for the advanced student of literature.

Personnel and Guidance Journal (monthly, October through May)

QST (monthly) Selected articles and information of interest to amateur radio enthusiasts.

Social Casework (monthly) Articles of interest to social and caseworkers.

Social Work (quarterly) Articles of interest to social and caseworkers.

Tape Recording (monthly) Articles on using tape recorders, recording techniques, and tape equipment.

Requests for additional information concerning any recorded periodicals may be addressed to the Division for the Blind, Library of Congress, Washington, D. C. 20540.

APPENDIX V

DIVISION FOR THE BLIND — LIBRARY OF CONGRESS

TALKING BOOK

(From reports submitted by Regional Libraries)

REGIONAL LIBRARY	ACTIVE READERS	CIRCULATION Talking Book Containers	AVERAGE CIRCULATION Per Reader
ALBANY	4,788	108,402	23
ATLANTA	2,939	90,787	31
AUSTIN	2,881	93,338	32
BATON ROUGE	1,786	60,269	34
CHICAGO	2,427	104,617	43
CINCINNATI	2,598	149,463	58
CLEVELAND	2,513	111,981	45
DAYTONA BEACH	2,279	102,559	45
DENVER	1,563	66,071	42
DES MOINES	1,387	76,692	55
FARIBAULT	1,682	65,835	39
HONOLULU	246	11,665	47
INDIANAPOLIS	1,594	54,242	34
LANSING	2,334	99,978	43
LINCOLN	1,326	29,377	22
LOS ANGELES	4,976	240,247	48
MILWAUKEE	1,685	83,288	49
NEW YORK	4,382	190,718	44
OKLAHOMA CITY	1,871	71,148	38
PHILADELPHIA	8,225	224,092	27
PITTSBURGH	2,667	109,891	41
PORTLAND	2,257	89,641	40
RALEIGH	2,232	84,102	38
RICHMOND	2,429	83,125	34
SACRAMENTO	3,383	154,573	46
SALT LAKE CITY	975	53,268	55
SEATTLE	2,197	95,520	43
ST. LOUIS	2,941	89,658	30
WASHINGTON, D. C.	619	18,755	30
WATERTOWN	3,321	118,281	36
WAYNE	1,138	30,221	27
TOTALS	77,641	2,961,804	38

December 1964

BRAILLE

(From reports submitted by Regional Libraries)

REGIONAL LIBRARY	ACTIVE READERS 1964	CIRCULATION Braille Volumes 1964	AVERAGE CIRCULATION Per Reader 1964
ALBANY.	314	10,134	32
ATLANTA.	451	13,477	30
AUSTIN	343	15,094	44
BATON ROUGE. . . .	125	3,355	27
CHICAGO	757	19,837	26
CINCINNATI	271	12,093	45
CLEVELAND.	332	12,923	39
DAYTONA BEACH. .	-	-	-
DENVER.	232	6,901	30
DES MOINES.	375	10,405	28
FARIBAULT	201	7,282	36
HONOLULU.	60	2,248	37
INDIANAPOLIS	204	3,797	19
LANSING	704	42,683	60
LINCOLN	80	1,426	18
LOS ANGELES	982	54,823	56
MILWAUKEE.	145	5,991	41
NEW YORK.	1,201	36,330	30
OKLAHOMA CITY . .	293	9,246	32
PHILADELPHIA. . . .	2,684	63,564	24
PITTSBURGH	-	-	-
PORTLAND.	188	5,813	31
RALEIGH	-	-	-
RICHMOND.	-	-	-
SACRAMENTO.	619	17,716	29
SALT LAKE CITY. .	131	4,119	31
SEATTLE.	336	6,461	19
ST. LOUIS.	320	8,227	26
WASHINGTON, D. C..	1,241	21,169	17
WATERTOWN	529	29,416	56
WAYNE	315	5,447	17
TOTALS	13,433	429,977	32

December 1964

APPENDIX VI

PUBLICATIONS OF THE DIVISION FOR THE BLIND
FREE UPON REQUEST

Form in which publication appears is indicated with each item

General Information

Books for the Blind. (A pamphlet about the whole program.) Inkprint, braille, and recording.
Division for the Blind Newsletter. Large type only.
Fact Sheet. (Statistics about the program.) Large type only.

Catalogs and Booklists

Braille

Press-braille, 1931-1948. Print only. Supplements: 1948-1954; 1955-1961. Print only. 1962-1963. Print and braille. 1964. Print only.
Juvenile. Large type and braille.
Hand-copied: Union Catalog Supplement, 1960. Print and braille.

Recorded Books

Talking Books. 1955-1961. Supplement: 1962-1963, 1964. All in print only.
Juvenile. Large type and braille.
Magnetic tape. Large type and braille.

Booklist

Reading for Profit, an annotated list of selected press-braille books, talking books, and books on magnetic tape. January 1963. Large type and braille.

Braille Transcribing

Alphabet and numerals. (Braille card)
Instruction manual, third edition, 1962. With supplement. Print and braille.
List of organizations and individuals transcribing books. Print and braille.
Volunteer braille transcribing. (A pamphlet for transcriber candidates)

Technical Information

Maintenance Guidebook for Talking-Book Machines. Print and braille.
Talking book reproducers, service data. Print only.

Lists of Agencies and Libraries

Lending agencies for the distribution of talking-book machines provided by the Division for the Blind, January 1965. Print only.

Regional libraries distributing books provided by the Division for the Blind, January 1965. Print only.

Circulars.

The Division for the Blind from time to time issues the following circulars of interest to those in specialized fields:

Braille Circulars
Management Circulars
Reference Circulars
Technical Circulars

U.S. GOVERNMENT SPONSORED RESEARCH TO STUDY BLINDNESS-1965 SUPPLEMENT

by Mary E. Switzer and Warren Bledsoe

VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH GRANTS AND DEMONSTRATION PROJECTS

Listed by Grant Number, Grantee, Project Director and Purpose

GRANT NO.	PROJECT IDENTIFICATION	GRANTEE AND PROJECT DIRECTOR	PURPOSE AND INTEREST CATEGORY*
1296	Experimental Community Oriented Rehabilitation Center for "Vocationally Unfeasible" Blind Persons with Multiple Disabilities	Cleveland Society for the Blind 1958 East 93rd Street Cleveland, Ohio Cleo B. Dolan	To evolve a pattern of center and community rehabilitation services for multiply-handicapped blind persons which can be applied to other States. II-A, Prevocational-Centers
1305	An Industrial Workshop-Homework Demonstration for the Vocational Rehabilitation of the Older Blind.	Services to the Blind Division of Welfare State House Annex Concord, New Hampshire Carl Camp	To establish an industrial workshop-homework program for the older blind of the State, furnishing remunerative employment and the enabling rehabilitation services of work training and conditioning in an industrial setting to facilitate the placement of competent older workers in normal labor markets and to provide continuous employment on a full- or part-time basis to those persons unable to re-enter the competitive labor market. I-Vocational
1343	Orientation and Mobility Service Service for Legally Blind Persons.	Cincinnati Association for the Blind 1548 Central Parkway Cincinnati, Ohio Benjamin P. Groves	Mobility Project (II-D).

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* Code of Interest Category: I, Vocational; II-A, Prevocational-Centers; II-B, Prevocational Processes; II-C, Prevocational-Processes-Optical Aids; II-D, Prevocational-Processes-Mobility Demonstrations; II-E, Prevocational-Processes-Testing; III, Equipment; IV, Personnel.

VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH GRANTS AND DEMONSTRATION PROJECTS (Continued)

GRANT NO.	PROJECT IDENTIFICATION	GRANTEE AND PROJECT DIRECTOR	PURPOSE AND INTEREST CATEGORY*
1346	Planning Grant to consider Need and Feasibility of Establishing a Regional Rehabilitation Center for the Blind.	Columbia Lighthouse for the Blind 2021 - 14th St., N. W. Washington, D. C. J. Arthur Johnson	To secure the consultation services of persons experienced in mustering resources and operating regional facilities, especially for rehabilitation of the blind. II-A, Prevocational-Centers
1480	Comprehensive Adjustment Services for the Blind.	Rehabilitation Institute 261 Brady Street Detroit, Michigan Joseph M. Schaeffer, Md.	To demonstrate the feasibility and desirability of providing comprehensive adjustment services for the blind in an existing "general" rehabilitation hospital, rather than in a physically separate plant. II-A, Prevocational-Centers
1485	Training of the Blind for Professional Computer Work.	University of Cincinnati, College of Medicine Cincinnati, Ohio Theodore Sterling, Ph.D.	To explore the feasibility of training intelligent blind persons to function independently as computer programmers and thus make available to this handicapped group a new field of professional activity. I-Vocational
1487	Impact on Rehabilitation of Blind Persons of Placing a Full-time Psychiatrist in the Key Role in a Rehabilitation Center.	Catholic Guild for All the Blind 770 Centre Street Newton, Massachusetts Rev. Thos. J. Carroll	To demonstrate what happens in a rehabilitation center for newly blinded adults when a psychiatrist is placed in a key role as Rehabilitation Director Administrator. It is intended to demonstrate the anticipated impact on staff members and on trainees during a period in which the Rehabilitation-Director Administrator attempts to develop a staff into a cohesive whole. I-Vocational
1511	Mobility and Orientation Instruction of Blind People.	New Mexico Department of Public Welfare Division of Services for the Blind 408 Galisteo Street Santa Fe, New Mexico H. J. Hebbeln	Mobility Project (II-D).

* Code of Interest Category: I, Vocational; II-A, Prevocational-Centers; II-B, Prevocational Processes; II-C, Prevocational-Processes-Optical Aids; II-D, Prevocational-Processes-Mobility Demonstrations; II-E, Prevocational-Processes-Testing; III, Equipment; IV, Personnel.

VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH GRANTS AND DEMONSTRATION PROJECTS (Continued)

GRANT NO.	PROJECT IDENTIFICATION	GRANTEE AND PROJECT DIRECTOR	PURPOSE AND INTEREST CATEGORY*
1530	A Project to Plan for a Comprehensive Rehabilitation Center for the Blind.	Community Services for the Blind Suite e17 Atlanta National Bldg. 50 Whitehall St., S. W. Atlanta, Georgia Oscar Turk	To plan the establishment of a comprehensive rehabilitation center to serve the blind, operated by a nonprofit agency; to provide services in cooperation with existing community resources and augment them with needed services not available. II-A, Prevocational-Centers
1531	Planning Study of Housing Facilities for Blind Persons in Minneapolis and Hennepin County.	Minneapolis Society for the Blind 1936 Lyndale Ave., So. Minneapolis, Minnesota Mrs. Lee Johnston	To study the particular housing requirements of blind persons in different age, social and vocational groups and the development of new facilities if needed. II-B, Prevocational Process
1538	Mobility and Orientation Instruction of Blind People.	Evansville Association for the Blind 510 Second Avenue Evansville, Indiana John K. Flake	Mobility Project (II-D).
1539	Mobility and Orientation Instruction for Blind Persons.	Rhode Island Association for the Blind 39-40 Arcade Building Providence, Rhode Island Mrs. Helen M. Norden	Mobility Project (II-D).
1541	Harris County, Texas Mobility and Orientation Instruction of Blind Children and Adults.	Houston-Harris County Lighthouse for the Blind 3530 West Dallas Houston, Texas Robert W. Carrick	Mobility Project (II-D).
1542	Low Vision Lens Service for Partially Sighted Persons Living in 5 Counties in Ohio and Kentucky	Cincinnati Association for the Blind 1548 Central Avenue Cincinnati, Ohio Benjamin P. Groves	Optical Aids Project (II-C).

* Code of Interest Category: I, Vocational; II-A, Prevocational-Centers; II-B, Prevocational Processes; II-C, Prevocational-Processes-Optical Aids; II-D, Prevocational-Processes-Mobility Demonstrations; II-E, Prevocational-Processes-Testing; III, Equipment; IV, Personnel.

VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH GRANTS AND DEMONSTRATION PROJECTS (Continued)

GRANT NO.	PROJECT IDENTIFICATION	GRANTEE AND PROJECT DIRECTOR	PURPOSE AND INTEREST CATEGORY*
1571	Development of Raised Line Drawings as Supplementary Tools in the Education of the Blind.	Recording for the Blind 121 East 58th Street New York, New York Burnham Carter	To determine to what extent and by what techniques the value of the recorded educational book for the blind student can be enhanced by the use of raised line drawings. III, Equipment
1578	Pre-College Orientation of Blind High School Graduates.	State University of New York Albany, New York	Through the means of the Rehabilitation Center of the Upstate Medical Center, Vocational Rehabilitation Service of the New York Department of Social Welfare and Syracuse University to establish a pre-college orientation program of 6-weeks duration for approximately 16 blind high school graduates who have been accepted into college, stressing personal, academic and social adjustments that will be required of blind students as they enter college life. II-A, Prevocational-Centers
1616	Mobility and Orientation Instruction of Blind People	State Department of Education, Division of Vocational Rehabilitation 129 State Office Bldg. Atlanta, Georgia A. P. Jarrell, Ph.D.	Mobility Project (II-D).
1618	A Project to Plan the Construction of a Comprehensive Rehabilitation Center for the Blind.	Florida Council for the Blind 108 West Pensacola St. Tallahassee, Florida Murdock Martin	To plan the construction and establishment of a comprehensive rehabilitation center to serve the blind, operated by the Florida Council for the Blind. II-A, Prevocational Centers

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* Code of Interest Category: I, Vocational; II-A, Prevocational-Centers; II-B, Prevocational Processes; II-C, Prevocational-Processes-Optical Aids; II-D, Prevocational-Processes-Mobility Demonstrations; II-E, Prevocational-Processes-Testing; III, Equipment; IV, Personnel.

VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH GRANTS AND DEMONSTRATION PROJECTS (Continued)

GRANT NO.	PROJECT IDENTIFICATION	GRANTEE AND PROJECT DIRECTOR	PURPOSE AND INTEREST CATEGORY*
1625	Stanford Ohwaki-Kohs Tactile Block-Design Intelligence Test for the Blind.	Stanford University School of Medicine Division of Rehabilitation Medicine Palo Alto, California William L. Dauterman	To contribute to the development of meaningful instruments for the measurement of the intelligence of blind persons through the refinement and field testing of the Ohwaki-Kohs Textile Book Design Intelligence Test for the Blind and to supply the existing adequate clinical tests existing adequate clinical tests with a non-verbal test. II-E, Prevocational-Processes-Testing
1626	Adapting the Randolph-Sheppard Vending Stand Program to the Advances of Automation.	Division of Services to the Visually Impaired Department of Vocational Rehabilitation 819 - 9th Street, N. W. Washington, D. C. Stephen A. Gambaro	To enable the Randolph-Sheppard Vending Stand Program to meet the challenge of automation by developing a role for blind persons in the field of automatic merchandising. I-Vocational
1663	Testing the Ability of Blind to Discriminate Color and Pattern with Their Fingers.	Barnard College New York, New York Richard P. Youtz	To find the percent of blind persons who show finger sensitivity to color, or to black and white. II-E, Prevocational-Processes-Testing
1683	Production of Braille and Inkprint Editions of Textbook and Mathematics Codes.	American Printing House for the Blind 1839 Frankfort Avenue Louisville, Kentucky Marjorie S. Hooper	To produce the printing plates and the printing and binding of the first inkprint and braille editions of the new Braille Code for Textbooks and the Revised Nemeth Codes of Braille Mathematics and Scientific notations. III-Equipment
1690	Development of Comprehensive Physical Orientation and Sensory Training for Blind School Children and Geriatric Clients.	Cleveland Society for the Blind 1958 East 93rd Street Cleveland, Ohio Cleo B. Dolan	Mobility Project (II-D).

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* Code of Interest Category: I, Vocational; II-A, Prevocational-Centers; II-B, Prevocational Processes; II-C, Prevocational-Processes-Optical Aids; II-D, Prevocational-Processes-Mobility Demonstrations; II-E, Prevocational-Processes-Testing; III, Equipment; IV, Personnel.

VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH GRANTS AND DEMONSTRATION PROJECTS (Continued)

GRANT NO.	PROJECT IDENTIFICATION	GRANTEE AND PROJECT DIRECTOR	PURPOSE AND INTEREST CATEGORY*
1691	Mobility and Orientation of Blind People.	Blind Children's Service Center 1519 Pruitt Street Fort Worth, Texas Paul W. Antle	Mobility Project (II-D).
1750	Research in Vocational Adjustment to Blindness.	American Center for Research in Blindness and Rehabilitation 770 Centre Street Newton, Massachusetts Leo H. Riley, M.D.	To insure the orderly dement of research projects in vocational adjustment to blindness by providing a director of research at the American Center for Research in Blindness and Rehabilitation. I-Vocational
1766	Planning Grant to Develop a Project Proposal to Study the Psychological and Educational Problems Involved in the Training of Computer Skills to the Blind.	University of Southern California University Park Los Angeles, California William H. Mitchell	To complete investigations prepare a final plan for the long-range study of the psychological, educational and environmental factors involved in the training of computer skills to the blind. I-Vocational
RC-18	Sensory Aids Evaluation	Massachusetts Institute of Technology Cambridge, Massachusetts John K. Dupress	Proposal for the Establishment of a Center for Sensory Aids Evaluation and Development. III-Equipment

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* Code of Interest Category: I, Vocational; II-A, Prevocational-Centers; II-B, Prevocational Processes; II-C, Prevocational-Processes-Optical Aids; II-D, Prevocational-Processes-Mobility Demonstrations; II-E, Prevocational-Processes-Testing; III, Equipment; IV, Personnel.

VOCATIONAL REHABILITATION ADMINISTRATION GRANT FUNDS

FISCAL YEARS 1964-1965

New Grants

Project No.	Grantee	Beginning Year	Grant 1964	Awards 1965
1296	Cleveland Society for the Blind Cleveland, Ohio	1965	$	$42,500
1306	Services to the Blind, Division of Welfare, Concord, New Hampshire	1965		26,321
1343	Cincinnati, Association for the Blind Cincinnati, Ohio	1965		9,290
1436	Columbia Lighthouse for the Blind Washington, D. C..	1964	8,800	
1480	Rehabilitation Institute Detroit, Michigan	1964	37,600	
1485	University of Cincinnati, College of Medicine, Cincinnati, Ohio	1965		59,597
1487	Catholic Guild for the Blind Boston, Massachusetts	1964	26,018	
1511	Division of Services to the Blind Department of Public Welfare Santa Fe, New Mexico	1964	7,924	
1530	Community Services for the Blind Atlanta, Georgia.	1964	14,782	
1531	Minneapolis Society for the Blind Minneapolis, Minnesota	1964	14,500	
1538	Evansville Association for the Blind Evansville, Indiana	1965		11,850
1539	Rhode Island Association for the Blind Providence, Rhode Island.	1965		10,531
1541	Houston-Harris County Lighthouse for the Blind, Houston, Texas . . .	1965		9,830
1542	Cincinnati Association for the Blind Cincinnati, Ohio	1965		13,577
1571	Recordings for the Blind New York, New York.	1965		21,500

VOCATIONAL REHABILITATION ADMINISTRATION GRANT FUNDS

FISCAL YEARS 1964-1965

New Grants

Project No.	Grantee	Beginning Year	Grant 1964	Awards 1965
1578	State of New York, University Albany, New York	1964	$16,503	$
1616	Division of Vocational Rehabilitation Atlanta, Georgia	1965		9,371
1618	Stanford University Palo Alto, California	1965		29,623
1626	Department of Vocational Rehabilitation, Washington, D. C.	1965		25,000
1663	Barnard College New York, New York	1965		4,500
1683	American Printing House for the Blind, Louisville, Kentucky	1965		25,511
1690	Cleveland Society for the Blind Cleveland, Ohio	1965		9,846
1691	Blind Children's Service Center Fort Worth, Texas	1965		7,500
1750	Catholic Guild for All the Blind Newton, Massachusetts	1965		15,000
1766	University of Southern California Los Angeles, California	1965		15,000
RC-18	Massachusetts Institute of Technology Cambridge, Massachusetts	1965		92,500
	Totals		$141,127	$438,847

VOCATIONAL REHABILITATION ADMINISTRATION GRANT FUNDS
FISCAL YEARS 1964-1965

Continuation Grants

Project No.	Grantee	Beginning Year	Grant 1964	Awards 1965
672	Oklahoma State University Stillwater, Oklahoma.	1961	$ 2,918	$
835	Graduate School of Social Work Pittsburgh, Pennsylvania	1962		2,461
898	Perkins School for the Blind Watertown, Massachusetts	1963		21,250
1004	Industrial Home for the Blind Brooklyn, New York	1962		79,980
1082	Catholic Charities Chicago, Illinois.	1963		11,633
1107	Stanford Research Institute Menlo Park, California	1963	21,533	
1168	Alameda County School Department Alameda, California	1963		21,617
1198	Virginia Commission for the Visually Handicapped, Richmond, Virginia .	1963	3,200	
1228	Metropolitan Society for the Blind Detroit, Michigan.	1964		19,624
1232	Arkansas Enterprises for the Blind Little Rock, Arkansas	1963	17,480	
1241	Eye Research Foundation of Bethesda Bethesda, Maryland	1963		9,934
1325	Minneapolis Society for the Blind Minneapolis, Minnesota.	1964		8,180
1328	Arkansas Enterprises for the Blind Little Rock, Arkansas	1964		8,400
1336	North Dakota School of Science Wahpeton, North Dakota.	1964		36,178
1344	Marquette University School of Medicine, Milwaukee, Wisconsin.	1964		13,854

VOCATIONAL REHABILITATION ADMINISTRATION
GRANT FUNDS — FISCAL YEARS 1964-1965

Continuation Grants

Project No.	Grantee	Beginning Year	Grant Awards 1964	1965
1382	Eye Research Foundation of Bethesda Bethesda, Maryland	1964	$	$38,993
RC-3	Georgetown University Washington, D. C..	1960	97,975	17,802
RC-8	Massachusetts Institute of Technology Cambridge, Massachusetts.	1961	5,559	72,706
	Totals		$158,890	$362,612

REPORTS RESULTING FROM VOCATIONAL REHABILITATION ADMINISTRATION RESEARCH AND DEMONSTRATION PROJECTS CONCERNING BLINDNESS

416. Utah Commission for the Blind, Salt Lake City, Utah.
Whitney, J. Fred, Sight Conservation Consultant (Perry, Donald W., Project Director). Optical Aids Clinic. Unpublished final report.

672. Oklahoma State University, Stillwater, Oklahoma.
Salmon, F. Cuthbert, Project Director, and Salmon, Christine F. THE BLIND: Space Needs for Rehabilitation Architectural Guide. Published final report.

799. San Francisco Lighthouse for the Blind, San Francisco, California.
Felton, George W., Project Director; Rumsey, Winfield S., Executive Director. Regional Rehabilitation Center. Unpublished final report.

869. American Association of Workers for the Blind, Washington, D. C.
Diamond, Isabella S., Project Director. Catalogue of Basic Source Material in the Field of the Blind. A selective annotated dictionary catalogue on 3 x 5 library cards, published by the American Association of Workers for the Blind.

1412. Illinois Institute of Technology, Chicago, Illinois.
Shurrager, Harriett C., Project Director. Test Kit, Haptic Intelligence Scale for Adult Blind.

RC-8. Massachusetts Institute of Technology, Cambridge, Massachusetts.
(Department of Mechanical Engineering)
Robert C. Gammill. Braille Translation by Computer. Unpublished Report.

GRANTEE AGENCIES OF VOCATIONAL REHABILITATION ADMINISTRATION GRANTS CONCERNING BLINDNESS

Listed Alphabetically

Agency	Project No.
American Center for Research in Blindness and Rehabilitation Newton, Massachusetts	1750
American Printing House for the Blind Louisville, Kentucky	1683
Barnard College New York, New York	1663
Blind Children's Service Center Fort Worth, Texas	1691
Catholic Guild for All the Blind Newton, Massachusetts	1487
Cincinnati Association for the Blind Cincinnati, Ohio	1343 1542
Cleveland Society for the Blind Cleveland, Ohio	1296 1690
Columbia Lighthouse for the Blind Washington, D. C.	1436
Community Services for the Blind Atlanta, Georgia	1530
Department of Vocational Rehabilitation Division of Services to the Visually Impaired Washington, D. C.	1626
Division of Services to the Blind Santa Fe, New Mexico	1511
Division of Rehabilitation Medicine, Stanford University Palo Alto, California	1625
Division of Vocational Rehabilitation Atlanta, Georgia	1616
Evansville Association for the Blind Evansville, Indiana	1538
Florida Council for the Blind Tallahassee, Florida	1618

GRANTEE AGENCIES OF VOCATIONAL REHABILITATION ADMINISTRATION GRANTS CONCERNING BLINDNESS (Continued)

Agency	Project No.
Houston-Harris County Lighthouse for the Blind Houston, Texas	1618
Massachusetts Institute of Technology Cambridge, Massachusetts	RC-18
Minneapolis Society for the Blind Minneapolis, Minnesota	1531
Recording for the Blind, Inc. New York, New York	1571
Rehabilitation Institute Detroit, Michigan	1480
Rhode Island Association for the Blind Providence, Rhode Island	1539
Services to the Blind, Division of Welfare Concord, New Hampshire	1305
State University of New York Albany, New York	1578
University of Cincinnati, College of Medicine Cincinnati, Ohio	1485
University of Southern California Los Angeles, California	1766

PROJECT DIRECTORS OF VOCATIONAL REHABILITATION ADMINISTRATION GRANTS CONCERNING BLINDNESS

Alphabetically Listed

Project Director	Project No.	Project Director	Project No.
Antle, Paul	1691	Jarrell, A. P., Ph.D.	1616
Camp, Carl	1305	Jivoff, Leo, M.D.	1578
Carrick, Robert W.	1541	Johnson, J. Arthur	1346
Carroll, Rev. Thomas J.	1487	Johnston, Mrs. Lee	1351
Carter, Burnham	1571	Martin, Murdock	1618
Dauterman, William	1625	Mitchell, William	1766
Dolan, Cleo B.	1296 1690	Norden, Mrs. Helen M.	1539
Dupress, John K.	RC-18	Riley, Leo, M.D.	1750
Flake, John	1538	Schaeffer, Joseph M., M.D.	1480
Gambaro, Stephen A.	1626	Sterling, Theodor, Ph.D.	1485
Groves, Benjamin P.	1343 1542	Turk, Oscar	1530
Hebbeln, H.J.	1511	Youtz, Richard P.	1663
Hooper, Marjorie S.	1683		

INTERNATIONAL RESEARCH ACTIVITIES
VOCATIONAL REHABILITATION ADMINISTRATION

The Vocational Rehabilitation Administration is conducting a program of rehabilitation research abroad with American-owned foreign currency derived from the sale in foreign countries of U.S. agricultural surpluses.

The general purpose of the Vocational Rehabilitation Administration International Rehabilitation Research Program is to stimulate more countries to initiate research and demonstration activities that will solve some of their own particular rehabilitation problems and contribute to rehabilitation knowledge both in the United States and overseas. This program is limited to countries in which there are counterpart funds in excess of U.S. Embassy and other primary requirements, Brazil, Burma, Guinea, India, Israel, Pakistan, Poland, Syria, UAR Egypt and Yugoslavia. As of January, 1965, the Vocational Rehabilitation Administration approved 61 research projects.

In the past year, the Vocational Rehabilitation Administration entered into a cooperative agreement with the Christian Medical College and Brown Memorial Hospital, Ludhiana, Punjab, India, in connection with the operation of a mobile ophthalmological unit which in addition to collecting statistical data on the causes and extent of visual impairment is experimenting with new methods for rehabilitating people with impaired vision living in remote areas. Through the mobile unit, a broad range of ophthalmology in rehabilitation services are being provided persons with serious visual impairments living in villages near Ludhiana.

In another project, the Ministry of Social Welfare, Israel, has experimented with techniques for training blind people for employment in Israel's growing textile industries. Over 50 blind people have been trained and employed on a competitive basis in these industries. A film and training manual on these techniques is available from the Vocational Rehabilitation Administration on request.

One of the most rewarding phases of international rehabilitation research is the interchange of specialists and experts in rehabilitation between the United States and the participating countries. The exchanges are conducted under the provisions of the International Health Research Act, Public Law 86-610. Thus far, at the request of the project directors, the Vocational Rehabilitation Administration has sent about 50 U.S. surgeons, prosthetists and other specialists, including people involved in research work for the blind, to the participating countries to work for stipulated periods in the cooperative projects. From January-December, 1964, about the same number of people engaged in cooperative research projects abroad have come to the United States.

The Vocational Rehabilitation Administration is continuing to plan rehabilitation training programs for trainees, leaders and visitors from other countries. Thus far, programs have been arranged for approximately 1,650 persons from 81 countries who have been sent to the United States by their own Government, Agency for International Development, Department of State and the United States. This has been one of the most constructive aspects of the Vocational Rehabilitation Administration's International Activities since these trainees upon return to their home lands take positions of leadership in rehabilitation.

NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS CURRENT RESEARCH PROJECTS IN THE AREA OF BLINDNESS

Project Number	TITLE	INVESTIGATOR(S)	FISCAL YEAR	GRANT AWARD
NB 02022	Electro-tactile Communication for the Blind-Deaf	Carnegie Institute of Technology Pittsburgh, Pennsylvania B. vonHaller Gilmer, Ph.D. Robert H. Gibson, Ph.D.	1959 1960 1961 1962 1963 1964 Total	$ 9,952 6,502 6,502 17,850 12,600 12,600 $ 66,006
NB 03336	Factors in the Success of Guide Dogs for the Blind	Guide Dogs for the Blind, Inc. San Rafael, California Clarence J. Pfaffenberger	1961 1962 1963 1964 Total	30,629 25,749 26,828 26,868 $109,994
NB 04226	Electroencephalography and Severe Visual Deprivation	Northwestern University Evanston, Illinois Jerome Cohen, Ph.D.	1963 1965 Total	19,210 17,125 $ 36,335
NB 04738	Quantitative Measures of Echo-ranging in the Blind	Stanford Research Institute Menlo Park, California Winthrop N. Kellogg, Ph.D. Charles E. Rice, Ph.D.	1964 1965 Total	81,530 77,066 $158,596
NB 04870	Reading and Listening in Learning by the Blind	American Printing House for the Blind 1839 Frankfort Avenue Louisville, Kentucky Carson Y. Nolan, Ph.D.	1964 1965 Total	22,540 19,080 $ 41,620
NB 05150	Development of An Electronic Brailling System	George Peabody College Nashville, Tennessee R.W. Woodcock, D.Ed. Samuel C. Ashcroft, D.Ed.	1964 1965 1965 Total	11,328 32,419 25,200 $ 68,947
NB 05617	Conference on the Definition of Blindness	Catholic Guild for all the Blind Newton, Massachusetts Leo H. Riley, M.D.	1965 Total	3,000 $ 3,000

U.S. OFFICE OF EDUCATION RESEARCH PROGRAMS FOR VISUALLY HANDICAPPED

(Division of Handicapped Children and Youth)

PROJECT NO.	IDENTIFCATION DURATION AND COST	GRANTEE AND PRINCIPAL INVESTIGATOR	PURPOSE
R-002	Improvement of Tactual Maps for Children. 4 Years Cost: $27,450	The American Printing House for the Blind Louisville, Kentucky Carson Y. Nolan	To refine the symbology used on maps; to study methods of designing maps to insure maximum legibility; and to study the amounts and types of information that can be conveyed to blind children through tactual maps.
R-012	Divergent Thinking in Blind Children 2 Years Cost: $35,821	University of Pittsburgh Pittsburgh, Pennsylvania William J. Tisdall	To study the effects of visual deprivation upon verbal divergent thinking in blind children when compared with visually normal children.
R-052	A comparison of the Listening Ability of Blind Students and the Listening Ability of Sighted Students in the Intermediate Grades. 15 Months Cost: $2,500	Fordham University New York, New York Francis J. Crowley Barbara W. Lake	To study the effect of blindness, intelligence, and auditory communication rate, kind of material heard, and type of school attended, on the listening.
R-062	Effects of Experimental Teaching on the Visual Behavior of Children Educated As Though They Had No Vision. 9 Months Cost: $9,996	George Peabody College for Teachers Nashville, Tennessee S. C. Ashcroft	To confirm a previous study which demonstrated significant gains in visual functioning attributed to a short term intensive teaching procedure utilizing visual stimulation with low vision children.

U. S. OFFICE OF EDUCATION RESEARCH PROGRAMS FOR VISUALLY HANDICAPPED (Continued)

PROJECT NO.	IDENTIFICATION DURATION AND COST	GRANTEE AND PRINCIPAL INVESTIGATOR	PURPOSE
D-041	A Concentrated Mobility and Orientation Approach for Partially Seeing and Blind Children in Day School Settings. 2 Years Cost: $18,249	Kansas State Department of Public Instruction Topeka, Kansas Clara H. Robertson	To demonstrate the effect and importance of an itinerant mobility and orientation instructor for visually impaired children.
1766	School Achievement and Effect of Type Size on Reading in Visually Handicapped Children. 2 Years Cost: $80,263	University of Pittsburgh Pittsburgh, Pennsylvania Jack W. Birch	To interpret data concerning the reading speed and comprehension of partially seeing children on equivalent materials in varied sizes of type.
2526	Methods of Teaching Braille Reading 2-1/2 Years Cost: $77,374	San Francisco State College San Francisco, California Georgie Lee Abel	To test which methods of teaching braille reading produce better braille readers in terms of reading rate, reading comprehension and general reading achievement.
S-138	Comparison of Two Procedures for Teaching Reading to Primary Children With Visual Perceptual Difficulties 1 Year Cost: $7,243	San Diego State College San Diego, California Margaret LaPray Ramon Ross	To determine the relative effectiveness of visual training and typical classroom procedures in the modification of perceptual patterns of children having difficulty in learning to read.

U.S. VETERANS ADMINISTRATION RESEARCH CONCERNING BLINDNESS

(From data prepared by Howard Freiberger, Electronics Engineer, and reviewed by Eugene F. Murphy, Ph.D., Chief, Research and Development Division, Prosthetic and Sensory Aids Service, Veterans Administration, 252 Seventh Avenue, New York 10001.)

New Projects

PROJECT NO. NO.	IDENTIFICATION DURATION AND COST	CONTRACTOR OR GRANTEE ADDRESS	PRINCIPAL PERSONNEL	PURPOSE
V1005P-297-A	Object Detection by Pulsed Sound 5-4-64 to Present. Cost: $9,053	Bionics and Human Factors Acoustic Research Group Lockheed-California Company, Burbank 91503	John J. Dreher Ralph G. Bell John E. Parnell W.W.Sutherland	To study human perception of objects by use of pulsed or high-frequency sound, with special attention to mobility of the blind. Click-frequency components, background noise, and echoic environment will be considered along with sound returns from curbs, corners, and walls.
V1005P-365-A	Optophone Trials 10-15-64 to 6-30-65 Cost: $14,000	American Center for Research in Blindness and Rehabilitation 770 Centre Street	Leo H. Riley, M.D. Ann Harrington	To determine the performance attainable by blind individuals with the VA-Battelle optophone under clinical conditions.

Continuation Grants

V1005M	Output for Reading Machines 4-1-57 to present Cost: $183,722	Haskins Laboratories, Inc. 305 East 43rd New York, N. Y. 10017	Dr. Franklin S. Cooper Robert Epstein Geo. Sholes, Ph.D. Jane Gaitenby	To conduct fundamental studies of speech and speech-like sounds as outputs for various types of reading machines for the blind.
V1005M-	Word Reading Machine 4-1-57 to present Cost: $27,000	Haskins Laboratories, Inc. 305 East 43rd New York, N. Y.	Dr. Franklin S. Cooper Paul Brubaker Eugene Peterson Jane Gaitenby	The design of parts of the system has been modified to take advantage of flexibility possible because of this contractor's acquisition of a computer. Interface equipment is currently in development.
V1001M-1900	Guidance Device 3-15-50 to present Cost: $218,110	Haverford College Haverford, Pennsylvania	Prof. T. A. Benham J. M. Benjamin	To develop an improved electronic mobility aid for the blind based on active radiation, optical methods.

PROJECT NO.	IDENTIFICATION DURATION AND COST	CONTRACTOR OR GRANTEE ADDRESS	PRINCIPAL PERSONNEL	PURPOSE
V1005-M-1943	Personal Type Reading Machine 9-12-58 to present Cost: $254,031	Mauch Laboratories, Inc. 3035 Druden Rd. Dayton, Ohio 45439	Hans A. Mauch G. C. Smith	Further development of the Mauch personal-type reading machine for the blind.
V1005M-	Va-Batelle Optophone 7-1-58 to present Cost: $265,801	Batelle Memorial Institute 505 King Ave. Columbus, Ohio 43201	Dr. Wm. D. Hitt John L. Coffey R. R. McFarland C. B. Shields	Ten units were built during 1964. These are now in trial use at Columbus, Ohio, at Hines, Illinois, in New York, N.Y., at Newton, Mass., and at Princeton, N.J.
V1005P-5321	Spelled Speech 11-1-60 to present Cost: $42,132	Metfessel Laboratories 5100 Victoria Ave. Los Angeles, California	Dr. Milton F. Metfessel Dr. Constance Lovell	To develop spelled speech methods for application as audible output for inexpensive reading machine for the blind.
V1005M-9217	Obstacle Detectors for the Blind 6-6-61 to present Cost: $116,493	Bionic Instruments, Inc. 221 Rock Hill Rd. Bala-Cynwyd, Pennsylvania	J. M. Benjamin Prof. T. A. Benham D. R. Bolgiano	A miniaturized unit, 1/10 the size of the last model, is currently being developed. The ultimate configuration may be a cane with detection devices to look up to the regions where head and shoulders pass, ahead for obstacles, and down for sensing terrain discontinuities.

U.S. GOVERNMENT SPONSORED PROGRAMS TO TRAIN PERSONNEL IN THE REHABILITATION OF THE BLIND

by Margaret M. Ryan

INTRODUCTION

This article is related specifically to federally supported projects to train personnel for services to the blind and is generally limited to projects initiated or continued during the decade from 1955 through 1964. It is intended as a companion piece to the article "U.S. Government Sponsored Research to Study Blindness" in Blindness 1964 and the philosophy and policies expressed in that article are as applicable to training programs as to research activities.

As Mr. Louis Rives, former Chief, Division of Services to the Blind, said, "Our training activities must go hand in glove with the research program so that things learned can be put into the hands of people who will use them and also because it is an essential part of the learning process that the teacher continue to be a student."1/

The article also bears a relationship to the supplement on research projects and the article, "The Story of the Randolph-Sheppard Act," by Senator Jennings Randolph, both of which appear in this issue.

Historical Background

Although this article is necessarily limited in scope, no discussion of current day activities in the training of personnel for services to the blind would be complete without a brief review of past efforts in this direction, the prologue. The epilogue is yet to be written and, with continuing and improved efforts, based on ever-increasing new knowledge and techniques, it is not probable that a conclusion or a complete plan can be described within the lifetime of present readers.

The first significant organized work for the blind in the United States was the education of blind children, initiated, developed and directed by Dr. Samuel Gridley Howe, the creative, adventurous and unchallenged nineteenth century American trail blazer in work for the blind. Dr. Howe, a physician, drew on his experiences in Europe in implementing his ideas for educating blind children, including the training of their teachers, and, in addition to establishing the Perkins School, promoted the founding of schools far into the West. He could issue challenges but could also accept them as when, after being severely criticized by a visitor to Perkins School, he employed the visitor, Francis Campbell, one of the most gifted educators of the blind the world has ever known. Sir Francis — he was later knighted by King Edward VII in 1909 — went on to found in 1872 the Royal Normal College for the Blind to teach teachers of the blind their job.

Teacher Training Courses Started

Although forty-four Americans crossed the Atlantic in the 1870's and 1880's to help Campbell create a demonstration school and teacher training program in England, it was not until 1921 that one of these, Edward E. Allen, was able to muster the interest and resources to develop a formal training program in the United States. As director of the Perkins School, Dr. Allen inaugurated the so-called Harvard Class in cooperation with the School of Education of Harvard College.

A keen observer and prolific writer, Dr. Allen invested his prime years in planning the rebuilding and reorganization of two residential schools and in this task became increasingly impressed with the importance of personnel training. Other teacher training courses grew out of the Harvard Class and, eventually, work for the adult blind began to draw attention nationally, finding new allies and following different patterns from those used in the education of blind children.

Work for the adult blind in the United States received its modern impetus from Sir Francis' son, Charles F. Campbell, a dynamic product of the Royal Normal College. Mr. Campbell was instrumental in the establishment of the Massachusetts Commission for the Blind in 1906 and in converting the American Blind People's Improvement Association into the American Association of Workers for the Blind. Development of work for the adult blind can be directly traced in Mr. Campbell's magazine, Outlook for the Blind, which first appeared in 1907.

Blind Persons Themselves Active

Programs for the adult blind during the first decades of the twentieth century have a pattern similar to that of education of the blind in being problem-centered, client-centered and experimental. Just when actual personnel training in work for the adult blind began in the United States is rather difficult to pinpoint. Many of the first persons active in behalf of the adult blind were themselves blind, were disillusioned by existing methods, preoccupied with "getting the job done," and impatient with those less knowing than themselves about blindness.

The U.S. Office of Education had maintained a modest program of vocational rehabilitation and the Vocational Rehabilitation Act of 1920, providing vocational training for persons with physical handicaps, included blind persons among those eligible for training. Although there was some recognition that such training, to be effective, should be offered by persons knowledgeable about disability and its broad effect upon the individual concerned, little emphasis was given under either of the vocational rehabilitation programs to the training of personnel for services to the blind.

Once again, the earliest action may have been by Americans outside the United States. In 1928, the Canadian National Institute for the Blind invited Americans, recognized experts in the field, to come and teach placement and training techniques and continued to use these teachers for nine years. After the passage of the Social Security Act in 1935 which made permanent the Federal-State rehabilitation program, an expanded staff, seeing value in the Canadian program, invited Mr. Joseph Clunk, the American who had been using American ideas in Canada, to return home to continue his work. The Randolph-Shepherd Act, a milestone in providing employment opportunities for blind persons, was passed in 1936 and yet, except for this, it was not until 1943 that any further significant change was made in federally supported programs to assist blind persons in realizing their fullest potentials.

In his article, "Vocational Rehabilitation of the Blind,"2/ Donald H. Dabelstein, Assistant Director of the Office of Vocational Rehabilitation; said, "Recognizing the limitations of the existing legislation and the unmet needs of the disabled, Congress in July, 1943, enacted a series of amendments to the Vocational Rehabilitation Act of 1920 .... incorporated in Public Law 113 the Vocational Rehabilitation Act amendments of 1943 .... known as the Barden-Lafolette Act." Mr. Dabelstein explained that under this act, services for the blind became a section of a division of the Office of Vocational Rehabilitation and added, "A major activity of the Services for the Blind Section includes specialized training of personnel engaged by the State agencies in the placement of blind persons."

By 1949, eight courses with an enrollment of 72 persons had been conducted for blind persons engaged to place blind rehabilitants as employees in industrial plants; three courses for 37 agency workers engaged in placing blind persons in business enterprises; and one course for 11 persons engaged in placing blind persons in agricultural activities.

With this background, we are now prepared to describe developments since the passage of the Vocational Rehabilitation Act of 1954, the period toward which this article is directed.

Vocational Rehabilitation Administration

The training program in the Vocational Rehabilitation Administration is administered by the Division of Training under the supervision of the Assistant Commissioner for Research and Training. The over-all objective of the Division of Training is to increase the supply of qualified personnel to serve persons with disabilities. Although persons with disabilities may be, and often are, enrolled in the various training programs, primary responsibility for training the disabled for employment rests with the State vocational rehabilitation agencies, with the Division of Training focusing on personnel needs.

The authority for support of training of rehabilitation personnel is found in the Vocational Rehabilitation Act of 1954, Public Law 565, 83rd Congress, 68 Stat. 652 (29 U.S.C. 31 et seq.), as amended in — Section 4(a)(1), which provides that "...the Secretary shall make grants to States and public and other nonprofit organizations and agencies (1) for paying part of the cost of projects for...training, and traineeships...No grant shall be made under clause (1)...of this subsection for furnishing to an individual any one course of study extending for a period in excess of two years, except that, in the case of a course of study in physical medicine and rehabilitation, such period may not be in excess of three years. Any grant of funds under this subsection which will be used for direct services to physically handicapped individuals or for establishing facilities which will render direct services to such individuals must have the prior approval of the appropriate State agency."

Section 7(a), which provides that "...the Secretary shall...(3) provide short term training and instruction in technical matters relating to vocational rehabilitation services, including the establishment and maintenance of such research fellowships and traineeships, with such stipends and allowances...as he may deem necessary, except that no such training or instruction (or fellowship or scholarship) shall be provided any individual for any one course of study, other than a course of study in physical medicine and rehabilitation, for a period in excess of two years, or for a course of study in Physical Medicine and rehabilitation for a period in excess of three years."

Section 401.66 of the Regulations read "...(c) training, including professional education of personnel in all fields or disciplines which contribute to vocational rehabilitation, through provision of training, teaching or traineeship grants;..."

Section 401.80 of the Regulations read "...the Commissioner is authorized to provide short-term training and instruction in technical matters relating to vocational rehabilitation services for the purpose of increasing the number and competence of professional personnel concerned with providing such services. Such training and instruction shall include the establishment and maintenance of traineeships and research fellowships to provide financial assistance to individuals who are (a) pursuing technical or other specialized training courses; or (b) securing advanced research training or carrying out independent research in rehabilitation problems or methods."

VRA Staff Reviews Projects

All training projects related to the disability category blindness are reviewed by a committee of Vocational Rehabilitation Administration staff members, a committee which always includes the Chief of the Division of Services for the Blind. The Division of Training looks to the Division of Services for the Blind for guidance and recommendations on all activities having to do with persons who are blind. When indicated, ad hoc committees are convened to advise on policies and to determine needs in meeting the demand for improved services to persons without sight.

An ad hoc panel on training of personnel in the rehabilitation of the blind met in Washington, D.C. in June, 1958. The panel members were:

Mr. Lon Alsop, Executive Secretary-Director
Texas Commission for the Blind

Mr. Kenneth Bryan, Assistant Director
Washington State Department of Public Assistance

Mr. Alexander Handel, Director of Community Services
American Foundation for the Blind.

Mr. Kenneth Jernigan, Director
Iowa Commission for the Blind

Mr. Alfred McCauley, Rehabilitation Counseling Coordinator
College of Arts and Sciences, West Virginia University[3/]

Dr. Douglas MacFarland, Executive Secretary
Virginia Commission for the Visually Handicapped4/

Mr. George F. Meyer, Executive Director
New Jersey Commission for the Blind

Mr. Herbert Rusalem, Coordinator of Training
Brooklyn Industrial Home for the Blind

Mr. Don Russell, Director
Arkansas Division of Vocational Rehabilitation Services

Mr. Irvin Schloss, Legislative Analyst
American Foundation for the Blind

Mr. Arthur L. Voorhees, Specialist in Rehabilitation Services
American Foundation for the Blind

Mr. O.F. Wise, Director
Alabama Division of Vocational Rehabilitation

Dr. Norman Yoder, Director
Pennsylvania Department of Public Welfare
Office for the Blind

In addition to the panel members, the Vocational Rehabilitation Administration, formerly known as the Office of Vocational Rehabilitation, was represented at the meeting by the following: Miss Mary E. Switzer, Commissioner; Dr. James F. Garrett, Assistant Commissioner for Research and Training; Mr. Louis Rives, then Chief of Services for the Blind and now Program Planning Consultant. Vocational Rehabilitation Administration; Miss Cecile Hillyer, Chief, Division of Training; Mr. Hiram Chappell,* Rehabilitation Specialist, Division of Services for the Blind; and Mr. Edgar Porter, Consultant on Training, Division of State Programs.

The purpose of the meeting was to assist the Vocational Rehabilitation Administration in assessing the training needs for personnel engaged in the rehabilitation of the blind and in planning how best to meet these needs. Priority recommendations resulting from this meeting were:

1. Training on how to secure employment opportunities for blind persons in industry, agriculture, clerical work, and the professions.

2. The development and management of vending stand opportunities.

3. Mobility training and orientation to blindness.

4. A training program for home teachers.

A review of the training grant projects and other detailed information given later in this article indicate that the recommendations of this ad hoc committee on training have been followed in the training grant program for the rehabilitation of the blind.

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* Deceased.

This article would be incomplete without mention of another important meeting, sponsored by the American Foundation for the Blind and listed as project No. 27, which was held in New York City in June, 1959. This meeting was actually a workshop to establish criteria for the basic selection of mobility and orientation personnel; to develop a well-balanced curriculum and to recommend length of training and appropriate sponsorship.

Participants in the workshop, including the speakers were:

Miss Georgia Lee Abel, Program Specialist in Education
American Foundation for the Blind

Mr. M. Robert Barnett, Executive Director
American Foundation for the Blind

Mr. C. Warren Bledsoe, Assistant Chief
Division of Services for the Blind
Vocational Rehabilitation Administration

Mr. Oliver Burke, Chief, Mobility and Orientation
Arkansas Enterprises for the Blind

Rev. Thomas J. Carroll, Director
Catholic Guild for the Blind
Boston, Massachusetts

Mr. William Debetaz, Vice President
The Seeing Eye, Inc.
Morristown, New Jersey

Miss Kathern F. Gruber, Director, Division of Research
and Specialist Services
American Foundation for the Blind

Dr. Richard Hoover, Ophthalmologist
Baltimore, Maryland

Dr. Frederick M. Jervis, Director of Counseling
University of New Hampshire
Durham, New Hampshire

Mr. Irving J. Kruger, Rehabilitation Instructor
Commission for the Blind
Newark, New Jersey

Mr. Harold Richterman, Director, Rehabilitation Services
Industrial Home for the Blind
Brooklyn, New York

Mr. Ed Ronayne, Resource Teacher
Evans School
Denver, Colorado

Mr. Keane Shortell, Mobility Instructor
Industrial Home for the Blind
Brooklyn, New York

Mr. Frederick A. Silver, Mobility Therapist
St. Paul's Rehabilitation Center for the Blind
Newton, Massachusetts

Mr. Stanley Suterko, Blind Rehabilitation Section
Veterans Administration Hospital
Hines, Illinois

Mr. Arthur L. Voorhees, Program Specialist in Vocational
and Rehabilitation Services
American Foundation for the Blind, who acted as workshop
coordinator.

The workshop defined "mobility and/or orientation instructor" as "position descriptions used in work with blind people to describe teachers of techniques which enable blind persons to go about on their own." Recognizing that people make up the environment of the blind, who live vicariously through the experiences of sighted persons, and the importance of the personal relationship between a blind person and his teacher, the workshop gave much attention to criteria for the selection of mobility and orientation personnel. The criteria set up for admission to training programs subsequently established were:

1. Bachelor's degree with academic studies preferably in education, biological sciences, psychology and sociology.

2. Physical

    a. Vision. No visual impairment not correctible to 20/20. No errors in visual field under all common circumstances, and no evidence of pathology contributing to progressive deterioration.

    b. Hearing. Normal.

    c. Physical condition. Good

3. Personal characteristics

    a. Honesty

    b. Ability to get along with people, courteously professional but not necessarily warm.

    c. Keen observation and the ability to interpret observations.

    d. Ability to meet the demands of emotional stresses in a creative, realistic and optimistic way.

    e. A controlled desire for accomplishment.

    f. Patience

g. Tolerance

h. Pride in his job

i. Flexibility

j. Ability to compromise

k. Common sense

Seminars, Tutoring Recommended

Consideration of the second purpose of the workshop, to develop a well-balanced curriculum, resulted in a decision that for the training of mobility instructors any learning period of less than one year of graduate study should not be supported. The next recommendation, that the teaching of mobility is the task of a sighted person, was a departure from the classic theory of pioneers in the field but was well documented by the experience of its proponents. Areas of study to be included in the curriculum were:

1. Physical orientation and mobility.

2. Dynamics of human behavior related to blindness.

3. Functions of the human body in relation to blindness.

4. The sensorium and its relation to blindness.

5. Cultural and psychological implications of blindness.

It was further recommended that seminars, personal tutoring of the student by a "master orienter" on a one-to-one basis, reading and lectures be used for implementation of the curriculum.

The final recommendation of this workshop, related to the third purpose, was that the training facility be in a university setting, in a department of the university which has freedom to draw instructional staff from various departments and schools of the university, and with access to facilities for the laboratory practice.

As with the recommendation of the ad hoc committee on training of personnel, the Vocational Rehabilitation Administration gave careful consideration to the recommendations of the workshop on mobility and, as soon as possible, followed through on them with programs described later in this article.

The activities of the Division of Training cover four areas: Long-term training which includes teaching grants and traineeships, short-term training, in-service training and research fellowships. Although research fellowships are undoubtedly training, they are administered by the Division of Research Grants and Demonstrations through a fellowship board and are not, therefore, included in this article. Suffice it to say that they are fellowships awarded to citizens of the United States in any professional field concerned with vocational rehabilitation of disabled persons to (a) obtain advanced training in rehabilitation research, (b) increase their competence or broaden their experience in rehabilitation research, or (3) carry out a research project which holds promise of making a significant contribution to the vocational rehabilitation of disabled persons.

Long-Term Training Grants

Grants to educational institutions and agencies for support of basic or advanced professional training offered on an academic or calendar year basis are considered long-term training grants. They are of three kinds: (1) teaching grants; (2) traineeship grants; or (3) a combination of both. A teaching grant is made to assist educational institutions and agencies to establish, expand or improve training programs in the professional fields which contribute to the rehabilitation of disabled persons. Traineeship grants are made to educational institutions and agencies to provide financial assistance to students seeking training in rehabilitation.

The first eleven projects in the list of training projects were supported by long-term grants in the amounts shown in Table 1.* The subjects are shown but no attempt at elaboration of content will be made in this article except for those projects which are currently active.

Programs Offer Master's Degree

As a result of the workshop held in New York City in June, 1959, project No. 27, two university programs for the training of orientation and mobility instructors have been established, one at Boston College, project No. 3-60, and another at Western Michigan University, No. 6-54.

Both are in graduate departments of education and offer a master's degree in education. Their objectives are identical although the program at Boston College is called "Peripatology," the science and art of developing the remaining senses in blind persons in order to achieve optimum orientation and mobility, while that at Western Michigan University is called "Training in Orientation and Mobility."

Following World War II, which left many veterans blinded, the Veterans Administration put forth every effort to offer services necessary to enable them to re-establish a relationship with their environment. An outstanding program in orientation and mobility was developed at Hines Hospital, Hines, Illinois, and its instructors won recognition for their knowledge of blindness, for their techniques in teaching orientation and mobility through the use of the long cane, and for the success with which their students responded to their instruction. It was not surprising, therefore, that this Vocational Rehabilitation Administration training grant program was patterned after the Hines program and drew on its experiences and faculty in setting up the training programs at Boston College and Western Michigan University. Although the long cane method is the accepted technique for mobility in both programs, all of the students have a period of observation of the guide dog technique and sufficient knowledge of it to be able to recommend its use for those blind persons to whom it would be advantageous.

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* Some training programs offer short-term courses in conjunction with their long-term training projects. For this reason some projects are shown with double code numbers so that the projects and the grants may be properly related.

Most Hired Before Graduation

Since the admission of the first students, to Boston College in June, 1960, and to Western Michigan University in September, 1961, there have been 76 graduates of these courses. An employment survey completed in January, 1965, gives the employment status of these graduates as follows:

Orientation and mobility instructors	66
Classroom teachers	2
Advanced graduate study	2
Housewife	1
Other	1
No report	4
Total	76

It is of interest that the orientation and mobility instructors are employed in 26 different states. Their services are in great demand and most are hired several months before graduation. Consideration is being given to the needed expansion of these programs but the many factors involved, e.g., budgetary limitations and availability of qualified faculty, make it impossible at this writing to predict what course expansion will take.

In September, 1963, the first eight students were admitted to a training program for home teachers at Western Michigan University, a program supported under project No. 6-54. It was developed as a result of project No. 34, a joint undertaking of the Vocational Rehabilitation Administration and the American Association of Workers for the Blind, Inc. The purpose of the project was to conduct a study of home teaching practice as presently operating, to determine the unique contribution of the home teacher, and to make recommendation for the development of training programs for home teachers.

The findings of the study resulted in the publication Home Teachers of the Adult Blind and the establishment of the training program at Western Michigan University. This program covers three full semesters and leads to a master's degree in education. As in the mobility and orientation training programs, it is hoped that this program will be an expanding one in the future.

Grants for Summer Workshops

Since fiscal year 1961 the Vocational Rehabilitation Administration has made grants to Southern Illinois University, project No. 7-36, to support a professional level training program for employed counselors on developing opportunities for blind persons in competitive occupations. Three five-week courses are given annually and, in the first five years of the program, some 185 counselors from agencies for the blind, public and private, and State employment service and general rehabilitation agencies have completed a course. Seminars of one week, attended by counselors who have had the course, and held in various geographic locations throughout the country, have been given as one method for evaluating the effectiveness of the course. These, with letters, questionnaires and group meetings, indicate that the program is effective and that counselors who have completed the course are more knowledgeable and skilled in securing proper placements for blind clients.

Annual grants have been made since fiscal year 1960 to State University College at Oswego, New York, project No. 4-40, to conduct summer workshops for industrial arts instructors in residential and public schools to increase their technical competence and to better their understanding of teaching procedures, materials and industrial arts activities appropriate for blind students. Guidance and support for this project have been given by the American Foundation for the Blind and the American Association of Instructors of the Blind. Twenty students are enrolled annually for these workshops with grant funds providing traineeships to cover part of the costs of maintenance, transportation and tuition.

At the conclusion of the three-year demonstration project No. 442, "Rehabilitation Ophthalmology" in the summer of 1963, a grant was made to enable the Ophthalmology Division, Medical Center of Georgetown University, project No. 11, to apply the findings of the demonstration project to the training of residents in ophthalmology. The newly established training program, "Ophthalmology and Blindness," had as its objective to provide residents in ophthalmology with background data for clinical experience in problems of rehabilitating the blind. It is hoped that this teaching program may be a prototype for programs in other medical centers so that, eventually, all ophthalmologists will approach their patients with proper understanding and full knowledge of the comprehensive nature of their patients' problems.

A grant was made to the Pennsylvania Department of Public Welfare, Office for the Blind, project No. 5, to study and develop employment opportunities for the blind in professional occupations. This project has so far resulted in the publication of two books, Placing the Blind and Visually Handicapped in Professional Occupations and Characteristics of Blind and Visually Handicapped People in Professional, Sales and Managerial Work. A third volume, Placement of Blind and Visually Impaired persons in Industry, Service Occupations and Clerical Occupations is expected to be completed during the final year of the project. The response to the first two volumes produced by this study, as indicated by the demand for copies and comments on their content, has been most favorable and there is no doubt that this training project met a real need in the field of rehabilitation of the blind.

In addition to these special programs for training personnel to work with the blind, most training grants projects include content on blindness as a disability category and, in many, such content is not only found in the class room curriculum but is extended to include practical experience in working with blind persons. There is, therefore, a reservoir of persons in all of the helping professions who are knowledgeable about blindness and qualified to give service to blind persons to supplement the work of those being trained in the special programs.

Short-Term Training Grants

Training that is of shorter duration than a quarter or a semester of a regular academic year is generally regarded as short-term training. It is intended to precede or supplement basic or advanced professional education organized on an academic or calendar year basis. Short-term training courses generally range in length two to three days to six weeks, according to their specific purpose.

All projects from No. 12 through No. 67 were considered as short-term training and are shown in Table 2. A review of the subjects covered will show how closely they are related to the recommendations made in June 1958 by the ad hoc committee on training. For example, project No. 41 was a contract with Harbridge House, Inc. to study the operation and management of vending stands and to make recommendations for the improvement of this type of employment for blind persons. As stated earlier, projects No. 27 and No. 34 preceded the establishment of long-term training programs for orientation and mobility instructors and home teachers.

Although only short-term training courses directly related to the rehabilitation of the blind are included in the data for this article, it should be noted that many other short-term courses supported by the Vocational Rehabilitation Administration contain content relevant to work with the blind and the participants in them include personnel serving blind persons.

In-Service Training Grants

Grants are made to State vocational rehabilitation agencies for projects concerned with the training of their employees, over and above activities carried on under Sections 2 and 3 of Public Law 565, in order to assure a higher level of competence in serving the clients of the agency and to assist in expanding and improving vocational rehabilitation services. Table 3 indicates the extent to which State agencies serving the Blind have made use of In-Service training grants in providing on-going educational experiences for their staff members.

Fourteen states,* the District of Columbia, Puerto Rico, the Virgin Islands and Guam do not have separate agencies for services for the blind. In these jurisdictions services for the blind are included in the services of the general State agency. In-Service training grants to these general agencies, therefore, are beneficial to personnel working with the blind but differentiation of this category from others is not possible.

Conclusion

The significant progress which has been made in the decade from 1955 through 1964 in expanding and developing opportunities for persons to be trained in the philosophy and techniques required to offer effective services for the blind only serves to point up the possibilities for improved and new services, services designed to open avenues of approach which were, in days past, thought to be closed to the person without sight.

The Vocational Rehabilitation Administration, through its Division of Training, plans to explore all such possibilities, to encourage new ideas and to give every possible support to training programs which show promise of broadening the opportunities for blind persons to realize their potentials, intellectually, socially and vocationally. It may be that the epilogue can begin to take shape within the lifetime of the present readers:

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* Alabama, Alaska, Arkansas, California, Colorado, Georgia, Illinois, Kentucky, Maryland, North Dakota, Oklahoma, Utah, West Virginia and Wyoming.

VOCATIONAL REHABILITATION ADMINISTRATION TRAINING PROJECTS — REHABILITATION OF THE BLIND

Code No.	Sponsor	Project Director	Subject
1	Industrial Home for the Blind 57 Willoughby Street Brooklyn, New York	W.S. Rumsey	Rehabilitation Counseling.
2	Arkansas Enterprises for the Blind, Inc. 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Personal Adjustment
3-60	Boston College Graduate School Department of Education Chestnut Hill, Massachusetts	Dr. John R. Eichorn	Orientation and Mobility.
4-40	State University College Department of Industrial Arts Oswego, New York	Dr. James R. Hastings	Industrial Arts Instruction.
5	Department of Public Welfare Office for the Blind Health and Welfare Building Harrisburg, Pennsylvania	Dr. Norman M. Yoder	Placement of Blind and Visually Impaired Persons in Professional Occupations.
6-54	Western Michigan University School of Graduate Studies Department of Education Kalamazoo, Michigan	Donald Blasch	Orientation and Mobility; Home Teaching.
7-36	Southern Illinois University Rehabilitation Institute Carbondale, Illinois	Louis Vieceli	Development of Employment Opportunities for Blind Persons in Competitive Occupations.
8	San Francisco Lighthouse for the Blind, Inc. 1097 Howard Street San Francisco, California	Mrs. Frances Rose	Rehabilitation Counseling
9	Kansas State University Division of Extension Department of Continuing Education Manhattan, Kansas	John E. Kitchens	Development of a Curriculum and Training Syllabus for In-Service Training of Rehabilitation Counselors Serving the Rural Blind.

Code No.	Sponsor	Project Director	Subject
10	American Association of Workers for the Blind, Inc. 1511 K Street, N.W. Washington, D.C.	Dr. Gordon B. Connor	Professional Development of Personnel Serving the Blind.
11	Georgetown University Medical Center Ophthalmology Division 3800 Reservoir Road, N.W. Washington, D.C.	Peter Y. Evans, M.D.	Ophthalmology and Blindness
12	Industrial Home for the Blind 57 Willoughby Street Brooklyn, New York	W.S. Rumsey	Rehabilitation Counseling
13	Industrial Home for the Blind 57 Wiloughby Street Brooklyn, New York	W.S. Rumsey	1. Rehabilitation Counseling; 2. Optical Aids; 3. Orientation of New Professional Persons Serving the Blind.
14	National Industries for the Blind 1120 Avenue of Americas New York, New York	C.C. Kleber	Program for Executives in Organizational Work with the Blind.
15	Cincinnati Association for the Blind 1448 Central Park Way Cincinnati, Ohio	Calvin Glover	Rehabilitation Counseling with the Blind in Rural Areas.
16	Roosevelt University School of Music 430 South Michigan Avenue Chicago, Illinois	Joseph Creanza	Course for Instructors of the Blind in Piano
17	Indiana Agency for the Blind 536 West 30th Street Indianapolis, Indiana	Howard Patram	Orientation to Placement of Blind Persons
18	Bureau for the Blind and Sight Conservation State Department of Public Welfare Baton Rouge, Louisiana	William V. Bridges	Orientation for New Professional Personnel Working with the Blind — "Plus Factors."
19	State Commission for the Blind 316 Sam Houston State Office Building Austin, Texas	Lon Alsup	Orientation to Placement of the Blind

Code No.	Sponsor	Project Director	Subject
20	Board of Education and Services for the Blind State Office Building 165 Capitol Avenue Hartford, Connecticut	H. Kenneth McCollam	Orientation to Placement of the Blind
21	Office for the Blind Department of Public Welfare Health and Welfare Building Harrisburg, Pennsylvania	George Douth	Orientation to Placement of the Blind
22	Bureau for the Blind Division of Welfare State Office Building Jefferson City, Missouri	John B. Raithel	Refresher Course for Personnel Serving the Blind.
23	Services for the Blind State Department of Social Welfare State Office Building Topeka, Kansas	Harry E. Hayes	Orientation Program for New Professional Personnel Working with Blind Clients - "Plus Factors"
24	Alabama Institue for Deaf and Blind South Street Talladega, Alabama	W. B. Gaines	Placement of Blind Persons Living in Rural Areas.
24	Richmond Professional Institute 901 W. Franklin Street Richmond, Virginia	Dr. Wade O. Stalnaker	Supervision of Services for the Blind
26	American Foundation for the Blind 15 West 16th Street New York, New York	Arthur L. Voorhees	Development of Employment Opportunities for the Blind in Competitive Occupations.
27	American Foundation for Blind 15 West 16th Street New York, New York	Arthur L. Voorhees	Mobility Training.
28	University of Mississippi University, Mississippi	William M. Jones, Jr.	Psychological Testing of the Blind
29	Kansas State College Manhattan, Kansas	R.J. Verhaalen	Rehabilitation Counseling with the Blind.

Code No.	Sponsor	Project Director	Subject
30	University of Hawaii Honolulu, Hawaii	Holland Hudson	Placement of the Blind.
31	American Foundation for the Blind 15 West 16th Street New York, New York	J. Albert Asenjo	Industrial Arts Instruction.
32	American Foundation for the Blind 15 West 16th Street New York, New York	Arthur L. Voorhees	Administration of Rehabilitation Centers for the Blind.
33	University of Nebraska College of Medicine 42nd and Dewey Omaha, Nebraska	J. Hewitt Judd, M.D.	Diseases of the Eye
34	American Association of Workers for the Blind 1511 K Street, N.W. Washington, D.C.	Hulen C. Walker	Home Teaching
35	University of Tennessee School of Social Work 810 Broadway	Frances Clay	Interviewing and Counseling with THE Blind
36-7	Southern Illinois University Rehabilitation Institute Carbondale, Illinois	Louis Vieceli	Employment Opportunities for Blind Persons in Competitive Employment.
37	Texas Technological College Lubbock, Texas	Dr. Beatrix Cobb	Advanced Training for Rehabilitation Counselors Serving Blind Persons.
38	San Francisco State College Frederick Burk Foundation 1600 Holloway San Francisco, California	Dr. Daniel Sinick	Supervision of Vending Stand Programs
39	University of Oregon Eugene, Oregon	Vernon T. Thompson	Rehabilitation Services to Severely Handicapped Blind Persons
40-4	State University College Department of Industrial Arts Oswego, New York	Dr. James Hastings	Industrial Arts Instruction.

Code No.	Sponsor	Project Director	Subject
41	Harbridge House 275 Newbury Street Boston, Massachusetts	H.M. Temple	Vending Stand Management
42	New York State Department of Social Welfare 112 State Street Albany, New York	Herbert R. Brown	Integration of Community Services for the Blind.
43	University of Tennessee Nashville, Tennessee	Roy F. Center, Jr.	Home Teaching
44	University of Utah School of Social Work Salt Lake City, Utah	Dr. F. LeGrande Magleby	Casework Services in the Rehabilitation of the Blind.
45	Services for the Blind State Department of Social Welfare State Office Building Topeka, Kansas	Harry E. Hayes	Administration of Rehabilitation Centers for the Blind.
46	Texas Technological College Lubbock, Texas	Dr. Beatrix Cobb	Psychological Aspects of Blindness.
47	Northern State Teachers Aberdeen, South Dakota	W.J. Jerdo	Agency Cooperation for Services to the Blind.
48	American Association of Instructors of the Blind 2362 South Spring Avenue St. Louis, Missouri	Lawrence Blaha	Refresher Course in Orientation and Mobility
49	Louisiana State University School of Social Welfare Baton Rouge, Louisiana	Dr. Earl E. Klein	Home Teaching.
50	Columbia University School of Social Work 2 East 91st Street New York, New York	P. Fred DelliQuadri	Home Teaching.
51	Arkansas Enterprises for the Blind, Inc. 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Personal Adjustment of Blind Persons
52	Arkansas Enterprises for the Blind, Inc. 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Rehabilitation Center Services for Blind Persons.

Code No.	Sponsor	Project Director	Subject
53	Pennsylvania Department of Public Welfare Office for the Blind Health and Welfare Building Harrisburg, Pennsylvania	Dr. Norman Yoder	Relationships between Public and Private Agencies Serving the Blind.
54-6	Western Michigan University School of Graduate Studies Department of Education Kalamazoo, Michigan	Donald Blasch	Orientation and Mobility
55	American Association of Instructors of the Blind 2362 South Spring Avenue St. Louis, Missouri	Maurice Olsen	Occupational Information in Vocational Planning with Visually Handicapped High School Students.
56	Arkansas Enterprises for the Blind, Inc. 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Training Needs of Workers for the Blind
57	Hadley School for the Blind 700 Elm Street Winnetka, Illinois	Donald W. Hathaway	Standards for Training Blind Medical Transscribers.
58	Arkansas Enterprises for the Blind, Inc. 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Home Teaching.
59	Arkansas Enterprises for the Blind, Inc. 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Rehabilitation Potential and Problems of Blind Persons in Public and Residential Schools for the Blind.
60-3	Boston College Graduate School Department of Education Chestnut Hill, Massachusetts	Dr. John Eichorn	Orientation and Mobility.
61	Rhode Island Association for the Blind 39-49 Arcade Building Providence, Rhode Island	Helen W. Worden	Improvement and Expansion of Vending Stand Programs in State Agencies for the Blind.

Code No.	Sponsor	Project Director	Subject
62	American Foundation for the Blind 15 West 16th Street New York, New York	Arthur L. Voorhees	Employment of Blind Persons as Telephone Switchboard Operators.
63	New York Association for the Blind 111 East 59th Street New York, New York	Wesley D. Sprague	Placement of Blind Persons in Federal Employment under Civil Service.
64	Washburn University of Topeka College of Liberal Arts Topeka, Kansas	James M. Young	Case Recording for Counselors of the Blind.
65	Arkansas Enterprises for the Blind 2811 Fair Park Boulevard Little Rock, Arkansas	Roy Kumpe	Introduction to Rehabilitation of the Blind.

PUBLICATIONS

66 Placing the Blind and Visually Handicapped in Professional Occupations

67 Training the Volunteer to Assist the Home Teacher

SPONSORING AGENCIES OF VOCATIONAL REHABILITATION ADMINISTRATION TRAINING PROJECTS CONCERNING BLINDNESS

Alphabetically Listed

Agencies	Code Number
Alabama Institute for Deaf and Blind	24
American Association of Instructors of the Blind	48;55
American Association of Workers for the Blind, Inc.	10;34;67
American Foundation for the Blind	26;27;31;32;62
Arkansas Enterprises for the Blind, Inc.	2;51;52;56;58;59;65
Boston College Graduate School	3;60
Cincinnati Association for the Blind	15
Columbia University School of Social Work	50
Connecticut Board of Education and Services for the Blind	20
Georgetown University Medical Center	11
Hadley School for the Blind	57
Harbridge House	41
Hawaii, University of	30
Indiana Agency for the Blind	17
Industrial Home for the Blind	1;12;13
Kansas State University	9;29
Kansas State Department of Social Welfare, Services for the Blind	23;45
Louisiana Services for the Blind and Sight Conservation	18
Louisiana State University	49
Mississippi, University of	28
Missouri Division of Welfare, Bureau for the Blind	22
National Industries for the Blind	14
Nebraska, University of Medical School	33
New York Association for the Blind	63
New York State Department of Social Welfare, Commission for the Blind	42
Northern State Teachers College	47
Oregon, University of	39
Oswego, State University College at	4;40
Pennsylvania Department of Public Welfare, Office for the Blind	5;21;53;66
Rhode Island Association for the Blind	61
Richmond Professional Institute	25
Roosevelt University	16
San Francisco Lighthouse for the Blind, Inc.	8
San Francisco State College	38
Southern Illinois University	7'36
Tennessee, University of	35;43
Texas State Commission for the Blind	19
Texas Technological College	37;46
Utah, University of	44
Washburn University of Topeka	64
Western Michigan University, School of Graduate Studies	6;54

PROJECT DIRECTORS OF VOCATIONAL REHABILITATION ADMINISTRATION TRAINING GRANTS CONCERNING BLINDNESS

Alphabetically Listed

Project Director	Code Number
Alsup, Lou	19
Asenjo, J. Albert	31
Blaha, Lawrence	48
Blasch, Donald	6;54
Bridges, William V.	18
Brown, Herbert R.	42
Center, Roy F., Jr.	43
Clay Frances	35
Cobb, Dr. Beatrix	37;46
Connor, Dr. Gordon B.	10
Creanze, Joseph	16
DelliQuadri, P. Fred	50
Douth, George	21
Eichorn, Dr. John R.	3;60
Evans, Petter Y., M.D.	11
Gaines, W.B.	24
Glover, Calvin	15
Hastings, Dr. James	4;40
Hathaway, Donald W.	57
Hayes, Harry E.	23;45
Hudson, Holland	30
Jerdo, W.J.	47
Jones, William M., Jr.	28
Judd, J. Hewitt, M.D.	33
Kitchens, John E.	9
Kleber, C.C.	14
Klein, Dr. Earl E.	49
Kumpe, Roy	2;51;52;56;58;59;65
Magleby, Dr. F. LeGrande	44
McCollam, H. Kenneth	20
Olsen, Maurice	55
Patrem, Howard	17
Reithel, John B.	22
Ross, Mrs. Frances	8
Rumsey, W.S.	1;12;13
Sinick, Dr. Daniel	38
Sprague, Wesley D.	63
Stalnaker, Dr. Wade O.	25
Temple, H.M.	41
Thompson, Vernon T.	39
Verhaalen, Dr. R.J.	29
Vieceli, Louis	7;36
Voorhees, Arthur L.	26;27;32;62
Walker, Hulen C.	34
Worden, Helen W.	61
Yoder, Dr. Norman M.	5;53
Young, James M.	64

TABLE 1

VOCATIONAL REHABILITATION ADMINISTRATION

Long Term Training Grants By Fiscal Year - Rehabilitation of the Blind

Code No.	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	Total
1	$5,472	$17,220	$17,220	$36,595	$30,510						$107,017
2				3,850							3,850
3-60						$22,062	$ 81,907	$107,202	$107,572	$132,401	$451,144
4-40						10,988	13,835	21,325	21,578	14,640	62,366
5						2,400	44,300	42,000	25,000	42,000	155,700
6-54							43,800	31,558	97,528	142,108	314,994
7-36							25,866	35,931	36,720	39,788	138,305
8							752				752
9								22,530		11,838	34,368
10									15,000	24,575	39,575
11									34,902	21,723	56,625
Totals	5,472	17,220	17,220	40,445	30,510	35,450	210,460	240,546	338,300	429,073	1,364,696

TABLE 2

VOCATIONAL REHABILITATION ADMINISTRATION

Short-Term Training Grants by Fiscal Year

Code No.	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	Total
12	$7,741										$ 7,741
13		$16,000	$18,455								34,455
14		800									800
15		4,621									4,621
16		4,200	12,171								16,371
17		1,407									1,407
18		4,101									4,101
19		1,562									1,562
20			1,431								1,431
21			1,466								1,466
22			3,015								3,015
23			1,533								1,533
24				$3,200	$ 4,925						8,125
25				4,150				$ 1,157	$ 157		5,464
26					4,231						4,231
27					2,207						2,207
28					3,500						3,500
29					12,697		$ 7,494				20,191
30					3,725						3,725
31					14,008						14,008
32					10,000						10,000
33					2,555						2,555
34						$19,710	33,625	25,000			78,335
35						3,123					3,123
36-7						31,585	35,497	26,017	31,198	$29,618	153,915
37						3,712					3,712
38						13,040					13,040
39						6,219					6,219
Carried Forward	7,741	32,691	38,071	7,350	57,848	77,389	76,616	52,174	31,355	29,618	410,853

TABLE 2 - Cont'd

Code No.	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	Total
Brought Forward	$7,741	$32,691	$38,071	$7,350	$57,848	$ 77,389	$76,616	$52,174	$31,355	$29,618	$410,853
40-4						14,410	12,555	15,405	15,405	15,405	73,180
41						54,848	7,232	22,292	628		85,000
42							2,375				2,375
43							7,488				7,488
44							5,000				5,000
45							2,244				2,244
46							1,127				1,127
47								1,947			1,947
48								16,200	11,500		27,700
49								5,072			5,072
50								5,000			5,000
51								7,275			7,275
52								7,375			7,375
53									1,691		1,691
54-6									12,200	2,720	14,920
55									4,400		4,400
56									880		880
57									5,000		5,000
58									8,092		8,092
59									7,000		7,000
60-3										6,880	6,880
61										888	888
62										5,278	5,278
63										3,000	3,000
64										2,952	2,952
65										5,000	5,000
66										1,288	1,288
67										1,185	1,185
	$7,741	$32,691	$38,071	$7,350	$57,848	$146,647	$114,637	$132,740	$98,151	$74,214	$710,090

TABLE 3

VOCATIONAL REHABILITATION ADMINISTRATION

In-Service Training Grants By Fiscal Year - State Agencies for the Blind[1/]

State	1958	1959	1960	1961	1962	1963	1964	Total
Arizona	$ 500	$1,000	$1,450	$ 800	$ 920	$ 750	$ 750	$ 6,170
Connecticut	600	1,000	1,450	670	840	840	720	6,120
Delaware		1,000	1,033	251	211	210		2,705
Florida							3,750	3,750
Iowa		1,000	1,450	840	870		1,710	5,870
Kansas	750	750	600	241	392	706	1,116	4,555
Maine	1,200	1,500	750	796	922	693	465	6,326
Massachusetts			600		540	540		1,680
Michigan							795	795
Minnesota		1,950	1,800	720	746	1,176	783	7,175
Mississippi				3,200	2,500	2,478	2,583	10,761
Nebraska	346						783	1,129
Nevada			750	750				1,500
New Hampshire		750	1,100	684	240	541	1,290	4,605
New Jersey	750	1,095	1,125	585	790	970	1,300	6,615
New York		2,000	2,000	1,800	1,300	2,100	2,100	11,300
Ohio		5,274	3,375	2,640	1,838	2,308	2,592	18,027
Oregon		1,300				923		2,223
Pennsylvania	2,000	4,500	4,950	5,940	6,100	6,300	6,300	36,090
Rhode Island	500	1,000	1,450	630	558	457	706	5,301
South Dakota	500	1,500	1,365	540	540	471	540	5,456
Tennessee				1,500	1,999	1,888	1,776	7,163
Texas	4,750					2,000	1,500	8,250
Vermont	500	500	1,100	387	240	369		3,096
Virginia				2,250	662	690	531	4,133
Washington	771	1,500	1,450	1,450	1,460	1,000	1,135	8,766
Wisconsin	1,073	1,088	1,087	220	308	180	180	4,136
Total	14,240	28,707	28,885	26,894	23,976	27,590	33,405	183,697

1/ General State vocational rehabilitation agencies in the 14 states which do not have a separate agency for the blind have also had in-service training grants which would include personnel serving blind clients.

TABLE 4

VOCATIONAL REHABILITATION ADMINISTRATION

SUMMARY-TRAINING GRANT PROGRAM

REHABILITATION OF THE BLIND

Fiscal Year	Long-Term Training	Short-Term Training	In-Service Training State Agency Personnel	Total
1955	$ 5,472	$ 7,741		$ 13,213
1956	17,220	32,691		49,911
1957	17,220	38,071		55,291
1958	40,445	7,350	$14,240	62,035
1959	30,510	57,848	28,707	117,065
1960	35,450	146,647	28,885	210,982
1961	210,460	114,637	26,894	351,991
1962	240,546	132,740	23,976	397,262
1963	338,300	98,151	27,590	464,041
1964	429,073	74,214	33,405	536,692
	$1,364,696	$710,090	$183,697	$2,258,483

U.S. OFFICE OF EDUCATION

(Data furnished by the Division of Handicapped Children and Youth)

The Division of Handicapped Children and Youth in the Office of Education provides services to the Nation in areas related to the education of handicapped children under Public Law 85-926 as amended by Public Law 88-164 in October 1963. One of these services under Title III, Section 301 of the law, authorizes the Commissioner of Education to make grants to public or other nonprofit institutions of higher learning and to State educational agencies for the preparation of professional personnel for the education of handicapped children.

"Handicapped children" refers to all handicapped children — the mentally retarded, the deaf, hard of hearing, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or other health impaired children who, by reason thereof, require special education.

Grant-in-aid for the preparation of professional personnel is allotted to public and private institutions and to State educational agencies for:

1. Full-time traineeships (senior undergraduate) and full-time graduate fellowships
2. Full-time summer session traineeships
3. Full-time enrollment in short-term, special study institutes of three or more days for intensive study of a new development.
4. Program development grants to institutions of higher learning to assist them in organizing programs for the preparation of professional personnel.

The data collected here are concerned only with the education of the visually handicapped. The first grants under this new program are cited below and were awarded for use during academic year 1964-65 and summer 1965.

U.S. Office of Education Training Program
for the VISUALLY HANDICAPPED

State Education Department and Institution	Identification, Duration and Cost	Purpose
Alabama	Summer traineeships. Summer 1965; $3,000	To prepare professional personnel in the education of visually handicapped children.
Alaska	Summer traineeships. Summer 1965; $1,800	To prepare professional personnel in the education of visually handicapped children.
Arizona	Summer Traineeships. Summer 1965; $2,700	To prepare professional personnel in the education of visually handicapped children.

University of Arizona	Program Development Grant Academic year 1964-65; $15,000	To develop a teacher training program in the area of the visually handicapped.
California	Senior year traineeships. Full-time graduate fellowships. Academic Year 1964-65; $13,000	To prepare professional personnel in the education of visually handicapped children
San Francisco State College	Full-time graduate fellowships; Senior year traineeships; Summer traineeships. Academic year 1964-65 and Summer 1965; $76,000	To prepare professional personnel in the education of visually handicapped children.
Colorado	Summer traineeships. Summer 1965; $4,500	To prepare professional personnel in the education of visually handicapped children.
Colorado State	Full-time graduate fellowships; summer traineeships. Academic year 1964-65 and Summer 1965; $41,000	To prepare professional personnel in the education of visually handicapped children
Delaware	Full-time graduate fellowship. Academic year 1964-65; $5,800	To prepare professional personnel in the education of visually handicapped children.
Florida	Full-time graduate fellowship; summer and institute traineeships. Academic year 1964-65; $11,630	To prepare professional personnel in the education of visually handicapped children.
Hawaii	Summer traineeship Summer 1965; $900	To prepare professional personnel in the education of handicapped children.
Illinois State University	Senior year traineeships Academic year 1964-65; $10,800	To prepare professional personnel in the education of visually handicapped children.
Indiana	Summer traineeships Summer 1965; $3,600	To prepare professional personnel in the education of visually handicapped children.
Iowa	Summer traineeships Summer 1965; $2,400	To prepare professional personnel in the education of visually handicapped children.
Kansas	Full-time graduate fellowship; Summer traineeships. Academic year 1964-65 and Summer 1965; $11,800.	To prepare professional personnel in the education of visually handicapped children.

Kentucky	Summer traineeships Summer 1965; $2,250	To prepare professional personnel in the education of visually handicapped children.
Maryland	Summer traineeships Summer 1965; $2,400	To prepare professional personnel in the education of visually handicapped children.
Massachusetts	Full-time graduate fellowship. Senior year traineeship. Academic year 1964-65; $9,400.	To prepare professional personnel in the education of visually handicapped children.
Michigan	Senior year traineeship; Summer traineeship. Academic year 1964-65 and Summer 1965; $5,400	To prepare professional personnel in the education of visually handicapped children.
Eastern Michigan State Univ.	Senior year traineeships. Academic year 1964-65; $14,400	To prepare professional personnel in the education of visually handicapped children.
Michigan State University	Full time graduate fellowships; Senior Year traineeships; Academic Year 1964-65; $52,800	To prepare professional personnel in the education of visually handicapped children.
Wayne State	Full-time graduate fellowships; Senior year traineeships; Academic year 1964-65; $20,200	To prepare professional personnel in the education of visually handicapped children.
Minnesota	Summer traineeships Summer 1965; $3,750	To prepare professional personnel in the education of visually handicapped children.
University of Minnesota	Full-time graduate fellowships; summer traineeships Academic year 1964-65; $43,800.	To prepare professional personnel in the education of visually handicapped children.
Montana	Summer traineeships Summer 1965; $1,800	To prepare professional personnel in the education of visually handicapped children.
Nebraska	Summer traineeships Summer 1965; $3,600	To prepare professional personnel in the education of visually handicapped children.
New Jersey	Summer traineeships Summer 1965; $1,800	To prepare professional personnel in the education of visually handicapped children.

New York	Full-time graduate fellowships; Summer and institute traineeships, Academic year 1964-65; $12,360	To prepare professional personnel in the education of visually handicapped children.
Syracuse University	Summer traineeships Summer 1965; $7,200	To prepare professional personnel in the education of visually handicapped children.
Teachers College, Columbia Univ.	Institute traineeships Program development grant Academic year 1964-65; $35,200	To prepare professional personnel in the education of visually handicapped children and to reinstate the teacher training program.
North Dakota	Summer traineeships Summer 1965; $1,200	To prepare professional personnel in the education of visually handicapped children.
Ohio State University	Full-time graduate fellowships; Senior year traineeships; Academic year 1964-65; $26,000	To prepare professional personnel in the education of visually handicapped children.
Oklahoma	Summer traineeships Summer 1965; $1,200	To prepare professional personnel in the education of visually handicapped children.
Oregon	Full-time graduate fellowship, Academic year 1964-65; $5,800	To prepare professional personnel in the education of visually handicapped children.
Pennsylvania	Full-time graduate fellowships, Academic Year 1964-65; $11,600	To prepare professional personnel in the education of visually handicapped children.
University of Pittsburgh	Full-time graduate fellowships, Academic year 1964-65; $34,800	To prepare professional personnel in the education of visually handicapped children.
South Dakota	Senior year traineeships Academic year 1964-65; and $3,600	To prepare professional personnel in the education of visually handicapped children.
Tennessee	Full-time graduate fellowships; Summer traineeships Academic year 1964-65 and Summer 1965; $9,400	To prepare professional personnel in the education of visually handicapped children.
George Peabody College for teachers	Full-time graduate fellowships, Senior year traineeships, Summer traineeships Academic year 1964-65 and Summer 1965; $100,200	To prepare profession personnel in the education of visually handicapped children.

Texas	Summer and institute traineeships, Summer 1965; $8,100	To prepare professional personnel in the education of visually handicapped children.
University of Texas	Senior year traineeships; Summer traineeships. Academic year 1964-65 and Summer 1965; $21,600	To prepare professional personnel in the education of visually handicapped children.
Utah	Summer traineeships Summer 1965; $1,500	To prepare professional personnel in the education of visually handicapped children.
Vermont	Summer traineeships Summer 1965; $1,800	To prepare professional personnel in the education of visually handicapped children.
Washington	Summer traineeships. Summer 1965; $1,800	To prepare professional personnel in the education of visually handicapped children.
Wisconsin	Full-time graduate fellowship; summer traineeships Academic year 1964-65 and summer 1965; $8,200	To prepare professional personnel in the education of visually handicapped children.

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3. Mr. McCauley is now Associate Regional Representative, Region III, Vocational Rehabilitation Administration.
4. Dr. MacFarland is now Chief, Division of Services for the Blind, Vocational Rehabilitation Administration.

THE BEST FROM THE PAST FOR THE PRESENT

Life to Make Men Free

There was a time when to all right-thinking workers for the blind Samuel Gridley Howe was the undisputed professional father.

Of late years when he is mentioned, it is necessary not only to explain who he was, but to do it as quickly as possible with the kind of action and words which the age of television requires. This year, however, through the medium of television, millions who never heard the name of Howe felt the peculiar magic of his spirit when at the funeral of Sir Winston Churchill, Julia Ward Howe's "Battle Hymn of the Republic" was sung, closing with the exhortation, "Let us live to make men free."

There is little question that the person in whom Mrs. Howe's "saw the glory" most often was her husband Samuel. A month after his death in 1876, she said so in direct language:

> "I have had my share of a very high and noble companionship, alas! profiting so little by its' (sic) manifold opportunities of good..... I sit at my desk with the beloved books, dictionaries and papers about me. I ask, what have I done? He, my dear one, built up such noble undertakings. In this Community, those who understand the public work, find traces of him everywhere. Unfortunates of nearly every class bless his aid, his watchful benevolence...."

Doctor's Endless Task

By the time Howe was 30 years old the story of his life was significant and dramatic enough to fill the first volume of his biography. He went like Byron to fight with the Greeks for their liberty, a cause which offered him his first deep disillusionment and his first great dedication to the potential of people in whom the less idealistic saw no reason for investment of time or treasure. The best Byron could do was "not run away." Howe, lucky to be a physician, always had the doctor's endless task on his hands. But he also found time to organize 500 Greek volunteers to repair the harbor of Aegina, building a wharf with the ruins of a temple of Venus.

Few people would have seemed more unlikely as the prototype for the superintendent of a residential school for the blind than Howe back in Boston after six years in Greece. His almost accidental expousal of the cause of educating blind children anchored his life to an enormous complex of trying, minute, personal, human problems of people totally unlike himself in personal resources and endowments. His ability to put himself in their shoes revealed a moral and emotional versatility far more spectacular than the years in Greece.

Howe's personal image in work for the blind and also his home became the Perkins School. Yet he never permitted this institution, or any other, the indulgence of bottling up his spirit or intellect for purely internal consumption.

Enemy of Compromise

While he was planning the organization of the Perkins School, looking at institutions for the blind in Europe, his concern over Europe's old tyrannies took fire again, and he became involved with distressed Polish nationals under Prussian control. For activities in their behalf he was thrown into prison by the Hohenzollern dynasty, from which he was extricated only by the adroit maneuverings of the aging Marquis de Lafayette and the adroit American Minister to France, Mr. Rives.

As the century went on, Howe became more and more deeply involved with problems of freedom at home, a consistent enemy of compromise, the forces of which drove him to a temporary exile in Canada during the excitement after the John Brown raid. His war for freedom was ubiquitous and lifelong. He began the teaching of the "feeble-minded" and until his death was superintendent of the first school for them. With Horace Mann he began the oral teaching of the deaf. With Dorothea Dix he worked on the proper care of the insane. He was the first chairman and organizer of the Massachusetts Board of State Charities.

His most arresting achievement was the first recorded formal education of a deaf-blind child, Laura Bridgman. This was mentioned by Charles Dickens in his American notes and thereby became known to the enormous Dickensian reading public, one of whom was the father of Helen Keller, who thus became aware of the possibilities open to his daughter. In a peculiar way Howe was "married" to Laura Bridgman in the public mind, as much as he was to Julia Ward Howe. It was often his fate to shine by the reflected glory of both. On many rousing occasions at public gatherings, it was his wife who was the inevitable cynosure and major attraction as the "Glory! Hallelujahs!" echoed. The inevitable vanity and counter-vanity between so strong a pair is a matter of history, but it did not diminish a unity of ideals between two people who backed up the words of the "Battle Hymn" all their lives with action.

A young contemporary of Howe's described him as an old man, saying, "He was tall, angular, cadaverous, with a voice made shrill by contests with East winds, and a face finely cut and mobile, but otherwise without a single element of beauty, yet animated with a will power that carried all before him."

Such was not always the case. It is true that in the 1830's and 40's he made forays into the Middle and Southwest on which his enchantment of legislatures resulted in the building of a number of residential schools, by which he established his reputation as an oracle for legislators.

"The Noblest Visitor"

But it was his fate to lose one of the most important battles of his life. In the 1860's he was one of three commissioners appointed to The American Freedman's Inquiry to present a plan for orderly emancipation of the slaves to the Federal Government. His report embodied the basic principles of rehabilitation. It also carried the statement: "The essential is that we secure for them the means of making their own way; that we give them . . . 'a fair chance.' If, like whites, they are to be self-supporting, then, like whites, they ought to have those rights, civil and political, without which they are but laboring as a man labors with hands bound." The report was pigeon-holed.

Laura Bridgman, out of her deep night, one day wrote in her diary an entry in which she described Howe as "the noblest visitor." This is perhaps his most eloquent tribute.

One of his most notable essays on blindness was the address he delivered at the laying of the cornerstone of the school for the blind at Batavia in 1866. Ninety-nine years later, the ideas embodied in it are fresh, as is the vivid, though stately prose. Though perhaps not scientific enough to please the age of "ologies," it looks forward to our time and over our shoulders beyond it, foreshadowing an inevitable humanism as the destiny of human beings.

SAMUEL GRIDLEY HOWE

ADDRESS
Delivered at the Ceremony of
LAYING THE CORNER-STONE
of the
NEW YORK STATE INSTITUTION FOR THE BLIND
at Batavia,
September 6, 1866

My Friends and Fellow-Citizens:

The ceremony which brings us together is an uncommon one, and it suggests an uncommon train of thought.

Those in whose behalf an institution is to be established here, are blind; and we are naturally led to consider how the infirmity of blindness affects the mental condition, and the moral and social relations of men.

That which distinguishes humanity — which lifts man above all created earthy beings, and to a rank a little lower than the angels, is the mind, or soul, with its powers of outlook and self-inspection. But mind, or soul, or spirit — call it as we may — would be powerless and worthless in this state of being without language.

Language is to the mind more even than the right hand is to the body. Without language, we can have no knowledge of each other, save such as the brutes have; no society except gregariousness; no affections, save those growing out of animal instinct. If language were abolished, and man made dumb, the course of civilization would not only be arrested, but rolled backward; and, in a few generations, there would remain only tribes of wild men, battling among the ruins of cities and villages, with each other and with the brutes, for mere animal existence.

Language is not the mere servant of the mind, the vehicle of thought, but it is the instrument of our moral emotions, of our social affections; of all friendship, of all love. That love which is awakened through the sight, passes away with the decay of the beauty which is seen. But the love which is awakened by spiritual intercourse, lasts not only while life lasts, but survives the death of the loved object; and endures while memory endures.

Language, then, is the bond of union, of affection, and of interest, among individual men and women, — for their intercourse is mainly by speech, audible or written.

But language is of vast extent, and speech is only one of its powers. By speech and by print, men of our generation hold intercourse with each other. There are, moreover, some sorts of language by which the generations of men hold intercourse with other generations, and by which they converse across centuries and cycles of time. Among the various forms of language between the generations, and between the ages, monuments hold a high place.

As men and women unwittingly, and sometimes unwillingly, reveal their character, and even their secret motives of action, by the sort of language which they use, so the generations unwittingly reveal the prevailing ideas of the men who lived in them, by the works which they leave behind them. Consider the Pyramids of Egypt, and read the speech which they utter. Study not their hieroglyphics, nor believe their inscriptions, for the phrase "to lie like a tombstone," was probably as good in the great Necropolis of Egypt as it is in a modern graveyard; but consider what the huge structures themselves tell us of the generations which built them! What say the ten million cubic feet of solid masonry, enclosing two or three small chambers, whose entrances are so narrow that the enclosed sarcophagus must have been placed therein before the walls were built; and those entrances afterwards closed up by huge blocks of stone, too heavy to be moved by any common force? What does all this tell? What is the language of that generation, spoken by the tongue of the pyramids to this generation?

It is, that the monarchs were absolute, selfish, cruel and short-sighted. That they built these vast monuments to preserve their fame from oblivion, and their bodies from disturbance. Vain hope! Their very names are forgotten, and

"Not a pinch of dust remains of Cheops!"

The monuments tell us, moreover, that the people must have been ignorant, oppressed, and like "dumb, driven cattle."

They tell us, that great multitudes of men and women were driven in from towns and villages, to toil and moil, and lift stones and carry sand for weeks and months; and when some had died and all were exhausted, then that fresh gangs were driven in to take their places.

And so of smaller monuments, whether the triumphal arch, where the chained captive walks sadly behind the sculptured conquerors; or the storied column, with its winding procession of battles, assaults and sieges, leading up to the proud victor standing self-glorified on the top.

And so of those which tell a better story — the aqueducts, the fountains, the bridges, the canals, the docks and the like. If we study the monuments which a generation built, and the kind of men in whose honor they raised statues, we may learn much of the character of the people themselves.

You are assembled to lay the foundations of a monument which will speak to future generations; and although what you grave upon the corner-stone, and what you put within it, should never be seen, the monument itself will talk to future generations; and what will it tell them?

It will disclose that the physical condition of the human race in this country was imperfect and unfavorable, and that there were born to this generation, and expected to be born in the next, sightless children, numerous enough to form a persistent class. That children of this class were not only loved and cherished by their parents and kindred, but also cared for by the public. That there was no Mount Taygetus here, on which to expose them, with other infirm folk, to perish or be devoured, but asylums into which they were gathered and nurtured.

It will prove that the social and political union which here leagued three million people into one powerful State, was formed and maintained not only for defence against enemies, for common commercial interests, for great enterprises, for social prosperity and enjoyment, nor yet for mental culture and high civilization of the many, but also for the protection and care of the weak and inform. That the State of New York, which could dig out a navigable river clear across her broad land, — which had just armed and sent forth three hundred thousand sturdy soldiers to serve the common country and the cause of humanity, — that this great State, while holding on in her high career of material prosperity, and providing schools for all the children, took thought also that not even the sightless little ones should be neglected.

In such language will the building, whose foundation-stone you this day lay, speak to many generations in coming time.

But while thus noting with pleasure and even excusable pride, the humane impulses which prompt and which will carry forward the work, pardon me if I utter a word of warning.

Good intentions and kind impulses, do not necessarily lead to wise and truly human measures.

Nowhere is wisdom more necessary than in the guidance of charitable impulses. Meaning well is only half our duty; thinking right is the other and equally important half.

Every one of you has probably learned by experience, that he may by alms or unwise aid increase the very suffering which he sought to relieve.

How many times have you given for the mere luxury of giving? It is not only more blessed to give than to receive, but also more pleasant. Take an extreme case, and consider how many children are positively harmed by having too much done for them; and especially by having gifts showered too profusely upon them.

No people are more eager and successful than ours in pursuit of gain; but none so profuse in scattering it. We have a passion for giving gifts, especially to children. This passion waxes strong at particular seasons, the return of which is calculated upon by the cunning urchins, as the farmer calculates upon the early and the latter rain.

They consult the almanac which says of holidays, Look out for presents in drops; of birthdays, for abundance of gifts; and once in the year for the great hailstorm lasting from Christmas to New Year. Parents, then, as if half ashamed of their weakness, resort to the pleasant myth of Santa Claus, who pelts the eager urchins with all sorts of missiles, from sugar plums up to images of every sort of beast and bird that came out of Noah's ark; and many beside whose strange appearance would excite wonder and admiration in any modern museum or menagerie; for they are unlike anything in the heaven above, on the earth beneath, or the waters under the earth.

The wit of men and women is then taxed to invent new toys, and new ornaments; and many arts and trades are plied diligently for months before the holidays, to supply the demand for gifts. Meantime children are all on tip-toe of hope and expectation; and as the time approaches they can hardly think by day of anything but presents, or sleep at night without dreaming that Santa Claus is at hand. And when the day arrives, what multitude and what variety of gifts, from father, mother, brother, sister, aunt, uncle and cousin — by blood and by marriage to the third and fourth degree. Those who have wide family relations get presents enough to stock a small shop, and set up in trade.

Christmas to such children is not the day when the most inspired Son of God was born into the world to reveal his Father's love, and develop the divine capacity inherent in his human brethren, but the day when Santa Claus comes down the chimney to bring a new dispensation of toys and sugar plums.

To older children it is a day for receiving choicer gifts, of greater value every year.

Thus to the young and blessed anniversary is stripped of its most endearing associations and clad with others unfavorable in their nature. Love and affection do indeed crave to speak in language of tokens and gifts; and there is so much that is beautiful even in our Christmas festival, that rather than lose it, we would cling to all the extravagances, all the pranks and humors, and hold Santa Claus among our household gods. But may we not retain all that is graceful and good without the evil?

Be that as it may, I mention Christmas not to detract from its merits, but only to illustrate my meaning in speaking of gifts and undue attentions to blind children. To those born of wealthy parents, Santa Claus instead of a yearly visitor is a common carrier; and the class generally suffer rather from excess of sympathy than from lack of it; more from what is done for them, than from what is left undone; more from attentions than from neglect.

Better a bruise or a bump than not make their own way about. If an ordinary child falls over an object, you cry "Jump up and try another!" You should cry that to the blind. But no; those dear children must learn no hard lesson through suffering. Every obstacle must be removed from their way, which must be carpeted with velvet; and they must be cautioned against danger, instead of being encouraged to meet it. They are helped to do what they should learn to do alone; kept at home when they should be urged abroad;

seated in the rocking-chair when they should be tumbling about house and grounds; helped and waited upon when they should be held to help and wait upon their elders; spared when they should be urged; enervated where they should be hardened, and often demoralized by the habit of receiving as gifts what they should earn by hard effort, or resolutely forego.

For one blind child who is properly trained to consider the dangers, difficulties and obstacles arising from his condition, as things to be met and overcome, by sharpened senses, by hard study, or hard effort, by muscular strength and activity, by courage and presence of mind, by self-confidence and resolution — for one trained up in this spirit, a score are enervated and emasculated for life by excess of sympathy and unwise help during childhood.

It frequently happens that parents refuse to send a blind child to school or to an Institution until the best years for study are passed, simply from excess of affection and anxiety for its safety. The other children may wander abroad to gather courage and strength from facing dangers and overcoming difficulties; but this dear pet, who has the sorest need of all to be trained to hardy self-reliance; who should become strong in limb, and supple in joint; who should be a good gymnast, and climb, and jump, and lift weights, and swim and row; who should saw and pile wood, and feed cattle, and be put to every possible kind of work about the house and farm, that he may become healthy in body and resolute in purpose, the better to face and travel his stony road, — he must be wrapped in flannel, and kept in the rocking chair, to grow up pale and flabby, and awkward, and timid, because his mother "loved him, not wisely but too well."

As it is with individuals, so it is with communities; because society moved by pity for some special form of suffering, hastens to build up establishments which sometimes increase the very evil which it wishes to lessen.

There are several such already in this country; and unless we take heed there will be many more. Our people have rather a passion for public institutions, and when their attention is attracted to any suffering class, they make haste to organize one for its benefit.

But instead of first carefully inquiring whether an institution is absolutely necessary, that is whether there is no more natural and effectual manner of relieving the class; and afterwards, taking care that no vicious principle be incorporated into the establishment; they hastily build a great showy building, and gather within its walls a crowd of persons of like condition or infirmity; and organize a community where everything goes by clock-work and steam. If there be a vicious principle in the organization, as of closely associating persons who ought to live apart, it is forgotten in admiration of contrivances for making steam do what once was done by the good housewife, with her cook and maid; and of the big bright coppers, the garish walls, and the white floors.

But no steam power, nor human power can long keep a vicious principle from cropping out. It has done so in many European institutions of charity; it will do so in many of ours.

Let me cite one in Rome, a city boastful of the number and extent of its charitable institutions.

There stands, in one of the retired streets, dimly lighted by night, the great Foundling Hospital, as it is called. Though really it is a sort of free nursery.

In the outer wall there is a niche sheltered from the weather. At the back of the niche is a small door opening into the hospital. Then there is a crane which swings out and in, and to this crane is attached a nice warm cradle, near by which hangs a bell. When a woman wishes to get rid of her infant, she goes by night and lays it in the cradle, pulls the bell and runs away. Or if she fears to make any signal, she is sure that when the baby awakes and cries, it will arouse the watch; that the cradle will be swung into the wall, and her abandoned little one be fed, and clad, and cared for.

The impulse which prompted such an institution and such a practice, was beautiful and good. Some kind heart had been moved by hearing of little innocents left to suffer cold and hunger in the open streets, and pity rather than wisdom prompted the building of a foundling hospital. But it is more than probable, that for one child saved from death, a score are abandoned by mothers who would have taken care of them had they not been tempted by the facilities held out by the hospital, for getting rid of them with safety to the infants and to themselves. It thus tends to encourage vice, and to act as a premium upon crime.

No class has suffered so much from this lack of wisdom in the guidance of charitable emotions, as the blind have suffered, and do suffer. And this is easily understood. Of all bodily defects or infirmities, blindness is the one which seems the most dreadful. We feel and comprehend at once the severity of the privation; and we imagine that it entails a great deal more suffering and unhappiness than it really does. The sight of a blind man, and still more of a blind child, touches every heart, and appeals forcibly for sympathy and aid.

This sympathy and pity prompt us at once to some outward action; they are too strong for our control. We must do something, and not knowing well what to do, — not understanding what the sufferers really need — we put our hands in our pockets, and give money.

Thence it is that in all countries and all ages, before and since

"Blind Bartimeus at the gate
Of Jericho in darkness sate,"

the blind man has been considered as the object for alms-giving. The very thought of blindness, suggests a sightless man, standing by the way-side holding out his hat for alms.

So universal is this, that blindness and begging seem to some as synonymous.

Indeed, after police regulations become established, and vagrancy is punished, and begging is forbidden, and the streets are cleared of mendicants; still the blind man keeps his old stand at the corner, and holds out his hat. No policeman is so hard-hearted as to disturb him; and he is allowed by general consent to remain at his post, where he often gathers more money than the laborers can earn by their work.

In Italy they make every bridge a "Bridge of Sighs;" they stand at the city gates, and at the street crossings; or sit in their reserved seats on the steps of churches; and detecting with quick ear every approaching footstep, raise a plaintive clamor, which is changed to blessings if an alms is dropped, but sometimes to muttered curses if it is withheld.

Such is the general treatment which the blind as a class have received from the public in all countries. That treatment shows the existence of tender and charitable feelings the world over. But it shows, also, that those feelings, if unguided by reason, may do as much harm as good, if not more. With all their pity and their sympathy, people have failed to give the blind man what he most needs, and have unwittingly put obstacles in the way of his ever getting it.

Nor have governments been much wiser. Some of the old establishments for the blind are merely asylums, which have become centres of idleness and vice. The larger they are the worse they become. Witness the great Lazar House for the blind at Naples; and the "Quinze Vingts" or Asylum for fifteen score of blind men at Paris. The lives led there are not a whit better than that of the spectacled blind musicians in the Caffe des Aveugles, whose deplorable condition attracted the attention of the Abbe Haüy, and led to the formation of the first school for the blind.

Even the modern institutions of Europe and America, greatly superior as they are, in most respects, to the old ones, and admirable as most of them are, still savor too much of being merely charitable. They are organized too much like almshouses; and administered in such wise as to tend strongly to the formation of life asylums, disguised under other names.

One of the present difficulties is to correct the prevailing notion about the real condition and wants of the blind. People suppose that blindness implies not only dependence but unhappiness. That the blind are necessarily helpless, and therefore must always have direct aid if not support; and that even if educated they must still be objects of charity. Probably the popular notion about the institution whose corner-stone you today lay is, that of an asylum for blind children, in which they may remain for life.

Let me strive to correct some of these notions; and to explain the nature and effects of the infirmity of blindness.

I said, it seems to be the most dreadful one to which men are liable; but it only seems so to those who do not reflect.

Sore as is the affliction, there are sorer ones, which men can and do bear patiently, and even cheerfully. Should I ask whether you would rather be blind or deaf, most would exclaim, O, deaf, by all means. And so once should I have done; but not now. On the contrary, I hold that, to a person not obliged to struggle hard for a livelihood, blindness would be a lighter calamity than deafness, — I mean congenital blindness.

Nay, even with the superior advantage for manual work which a deaf mute has, I should prefer that a child of mine be blind rather than deaf.

This may seem strange; but call to mind the blind persons and the deaf persons whom you have known, and I think you will find that most of the former have been not only resigned, but social and cheerful, while the latter are, for the most part, unsocial and unhappy.

Light is beautiful; but is darkness dreadful? None of you can see in the dark; but do you expect to be unhappy tonight, even though kerosene and candles fail?

A great poet, relating his horrid dream of universal darkness, when

> "   the bright sun was extinguished,
> And the stars did wander through the eternal space
> Rayless and pathless; and the icy earth
> Swung blind and blackening in the moonless air,"

shows that all the dreadful effects came not from lack of light, but lack of heat; and that upon the brow of the last man, not darkness, but "famine, had written, fiend!"

But the darkness of which we are thinking implies no lack of warmth, and it affects not society. Our dream is of the effect upon ourselves alone, all others being in the bright sunlight.

Imagine yourselves, then, sitting at twilight with your children, your family, and your friends gathered about you; and the light fading until you cannot see each others' faces. You are then blind, but are you unhappy until the candles are lighted? On the contrary, do you not sit and enjoy each others' society, and talk, and laugh, as much as before.

But suppose you are all struck dumb, even before the light fades away, and you can have no more free exchange of thought, no more words of endearment and affection, no more stories and jokes, no more laughter and song, but instead thereof a dread stillness, which not even a cannon nor a thunder-clap could break; where, then, is your society?

Again, imagine a man possessed of all the comforts and refinements of outward life; with a cultivated mind and literary tastes; with a warm heart and pure affections; and who is blessed with deserving objects of his love; suppose such a man to be making merry with his relations and friends, and playing blind-man's buff with his children; — while he is blindfolded is he not as merry as ever? Does he not love the little ones whom he catches in his arms as well as though he could see them?

Now, suppose that he should find he could not remove the bandage for a day, a week, or a year. He would then be, for the time, a blind man. But in what would he have changed? What would he have lost? What great source of happiness would have been dried up in his bosom?

He soon learns to go about his house alone, and about the neighborhood, with a guide. He finds that he can attend to any ordinary business, if he chooses to do so. The world and its affairs, his friends and their welfare, have lost none of their interest for him. His home becomes doubly dear to him, and there he finds sources of pleasure which increase as they are drawn upon. In his library he finds no essential change, because poetry, philosophy and history lose no charms by being borne to his mind on the voice of affection; and custom soon gives to the habit of dictating all the pleasure there was in writing. Conversation, by which we learn more and improve more than by any and all modes of communing with other minds, becomes to him the means of new pleasure and profit.

But it is mostly in the greater development of his affections, and the exercise of them, that he finds compensations which he could not have hoped for. His home is not long dark because the rays of the sun are shut out, but, like the fabled cavern, it glows with the light of the gems which adorn it. The love and loyalty of his wife, the affection of his children, the tender regard and tried fidelity of his friends, — these jewels of the heart shine brighter for the darkness around him, and he feels that he would not lose one of them, even to recover his lost sight.

Indulgence in the exercise of disinterested affections and of love, is the only harmless intemperance; and the blind man intoxicates himself therewith by daily draughts.

This is not mere theory; experience shows that persons who become blind often grow more amiable, contented, and even cheerful than before.

There are exceptions of course, and it is unfortunate that Milton should have been one of them, — because his eminence as a poet and scholar makes his example conspicuous; and his words to be taken as the natural language of a class of unfortunates.

But Milton, austere and melancholy by temperament, saddened by blight of his generous and patriotic hopes, and embittered by his domestic troubles, was already under the cloud before darkness closed around him; and he would, doubtless, have sang sadly the rest of his life, had he not "sang darkly."

At any rate, he did not bear his misfortune as bravely as some have done. He should not, in this respect, be held up as an exemplar for the blind; nor should his plaintive utterances, musical as they are, be quoted as depicting faithfully their mental condition.

There have been other blind men more admirable in this respect, for they set forth in their lives and conversation the sublime moral height to which men may attain by grappling courageously the nettle misfortune, and "plucking thence the flower," happiness.

If it were a simple question between the sacrifice of sight or hearing, no one who duly weighs their comparative value to his higher nature, and their importance as ministers of the mind and soul, would hesitate about which would be the greatest loss to him. He who prefers the body and its pleasures — the outer world and its beauties — would choose deafness; but he who prefers the mind and its culture, the affections and their enjoyment, would choose blindness. This preference of hearing, however, would be given only by persons of a certain mental culture, and, (in the present state of society), of moderate competence; because, to the man obliged to labor for a livelihood, especially if others are dependent upon him, blindness becomes a more serious calamity.

The eye ministers most to the body, its wants, and its pleasures; the ear to the mind, its capacities and its affections. The choice which would be made between them, were one forced to the dreadful alternative of the loss of either, would be in some measure a test of the extent to which the spirit of Christianity had pervaded the community in which he lives.

If society practically recognizes the right of every one to a share of labor and of its profits; if its spirit is that of human brotherhood; of mutual co-operation, aid and assistance, — then a man would choose the lesser evil, — that which affects mostly the body, and impairs not the higher nature; he would prefer to be blind. If on the contrary, the spirit of the society in which he lives is that of selfish competition and antagonism; if the man has himself and his family to support, and if he must stand or fall solely by his own strength or weakness, — if brotherhood means only kith and kin, — then he might accept the other evil, for that would apparently leave a better chance of earning his living.

But if you look a little closer into the matter, you will see good reason for considering blindness less dreadful than deafness — expecially for children who are yet to get their education — that is, to have their mind and character developed. For all sensuous relations; for all outward, material, and mechanical purposes, sight is of the first importance; but for all mental, moral, and spiritual relations, the hearing is the queen of the senses. And this is because the one indispensable instrument for mental development is speech. Not language, in its general sense, which omprehends signs and pantomine, and which may be mastered by deaf mutes, but speech proper, which no deaf mute can ever acquire in any high degree of perfection. It is this which gives to the blind child such an immense advantage over the deaf child. He can be educated just as we were educated, — just as the boys and girls who are growing up around him are educated.

Bear with me if I go a little into the dry philosophy of this subject.

Education is carried on mainly by means of language; but by all sorts of language, looks, gestures, actions and the like; while instruction is given chiefly through one sort of language, — speech, — that is, audible sounds, or spoken words, which are arbitrary signs of thought; and written words, which are arbitrary signs of audible sounds. Children therefore, in order to be instructed, must first learn these arbitrary audible sounds, or words.

But although the sounds or the words, which we adopt as the signs of our thoughts, are purely arbitrary, and we select one to express our thought, for example of a fruit, and say apple, while a Frenchman selects another sound and says pomme, still, speech itself is not arbitrary, but natural; that is, man does not select audible sounds from among the possible modes of expressing his thoughts, and make that the base of his language, but that mode is the one special mode suggested by his very nature. Some writers on deaf-mute instruction seem to overlook the psychological difference, and suppose that a language of visible signs may be a perfect substitute for one of vocal sounds. Not so. Speech is not an accidental attribute of humanity, but an essential one. It inheres in man as man. It is not a human invention, it is a natural outgrowth. Men speak because they cannot help it. There is indeed a natural disposition to attach some supplementary signs to thought, as movement of feature and limb, or pantomine; and these prevail among tribes and nations whose language is limited, but these are only adjuncts. Speech is the natural, therefore the best mode of expressing human thought; nay!

it is the only one by which there can be full freedom for the development of the intellectual and moral nature. Audible speech is immeasurably superior to any other mode of expression, as an instrument of human education and of instruction. No language of visible signs can ever approach in thoroughness and excellence, the language of audible words. As people advance in civilization they improve this language, and come to rely upon it entirely. They reject the adjuncts — the visible signs; they do not need to eke out their meaning by gestures; and they come to express every possible condition of things, and every phase of thought by a system of vocal sounds, which becomes their vernacular. Each generation of children catches the sounds or words, and almost without effort learns the language of the country; good, bad, or indifferent, — oaths and all.

But, in every generation there are a certain number, who, being born deaf, do not hear these sounds; and therefore cannot imitate them. They have, however, the common human disposition and desire to express emotion and thought by some outward signs; and the natural tendency to use vocal speech as the readiest sign, prompts them to attempt vocal utterance. As however, they cannot hear the words which they utter, they fail to make them uniform, and intelligible to others. They cannot modulate the voice and speak distinctly; and after painful efforts they give up in despair and remain dumb. Still, the desire to express feelings and thoughts by signs and so to commune with others, remains strong within them; and though they give up attempts to use the highest forms of language, they persist in the use of the lower form of visible signs.

They perceive that persons who speak do not confine themselves to making audible sounds, but use certain adjuncts of speech or interpretations of emotions, such as expressions of face and feature, gestures, and signs of various kinds. These are usually called natural signs, or natural language, though strictly speaking they are no more natural than are audible sounds. But these are the only parts of language which deaf children can seize upon, and they come to rely upon them alone.

They watch eagerly the play of the features, the expression of the countenance, and the gestures of the speaker, and imitate them. They invent other signs of their own, they multiply them, they emphasize them by earnest looks, and by eager gestures; and so form a language, which however is only rudimentary and imperfect. But besides its imperfections, this language cannot become common even among mutes, because no two adopt the same signs.

There is a certain resemblance, indeed, because they do for the most part seize upon some supposed analogy, and make a sign resembling the thing thought of: as whirling the hand for the motion of a wheel. This answers to a certain extent for things in the concrete; but when it comes to abstract matters they are lost. One selects one sign, another another; and of course they cannot form a common language. But this is not the worst of it. Men may doubtless have cognizance of facts and phenomena; as fire and ice and recall them to memory without attaching names thereto. But it is hardly conceivable that they should go farther, and form abstract ideas as to heat and cold, without names. Definite thought suggests a name, as substance causes shadow. At any rate, there can be no great mental development, and no high culture, without signs, and even very definite signs, for the thoughts; and there can be no precise, minute, and definite signs, except speech, oral or written. Indeed, they are necessary for the simple process of recollection; because the ideas which we have formed from impressions upon the senses, if without signs attached to them, would be like a pile of books without labels or title pages. Language is to thought, what the trellis is to the vine.

This it is which gives to the blind child such measureless advantage over the deaf child in acquiring knowledge. The first at eight years old comes to school fully armed with the great instruments of thought and study. You need waste no time in establishing means of communication between your mind and his; but the mute cannot understand a single word that you say. He has indeed a certain rude language of signs and gestures, to make known certain emotions and desires; but he has no sign for a word, and therefore no means of expressing definite thought.

You must teach him, by a slow and tedious process, that besides the sign which he has adopted for a horse, or a house, there is another visible sign; and you draw a house or a horse upon a blackboard.

This sign is founded on the likeness between the house or horse, and the picture of it. This you would do with any deaf-mute child, of whatever country; and all would understand it. Then you go farther, and make certain arbitrary marks, which to him are new and strange. Under the picture of the animal, you make five marks, which you call letters — h-o-r-s-e; then under the picture of the building you make other five — h-o-u-s-e. You have then to repeat the process over and over again, until the sight of those letters, arranged in that particular order, suggests to him the idea of the thing which you have in your mind.

I do not mean to say that this is the approved method used in the schools for mutes, but one which any person, not an expert, might adopt.

Let me illustrate this by the method which I devised to teach letters to Laura Bridgman, who was not only quite deaf, but quite blind, and almost devoid of the sense of smell, which is usually much relied upon by persons in her sad condition. I began with single short words, as pin and pen. I took some embossed letters, such as the blind use, and placing three of them, p-e-n, on the table beside a pen, made her feel them over and over again, until they became associated in her mind with the pen. Then I introduced a fourth letter, i, and put together p-i-n, and placed these beside a pin. These were felt of over and over and over again, until the three signs, placed in that order, became associated with a pin; so that when she felt them so placed on the page of a book, the thought of a pin came up in her mind. And so on, introducing new letters, placing them in new combinations. Slowly and gradually she went on, mastering new signs or letters until she had learned twenty-six, when she began to perceive that there were no more new ones, but only new combinations of the familiar ones. Then I took a label, as s-p-o-o-n, and pasted it on a spoon, and made her feel them over again and again and again; and so with other things. You see that as soon as she got hold of the thread, as soon as she found that by putting together certain letters in certain combinations, she could make me understand what things she had in her mind, and as soon as she had learned twenty-six of these, she was mistress of the alphabet, or elements of arbitrary language, and had only to go on and learn to spell the names of all things she could reach. This she was so eager to do, that thenceforward one could not satisfy her.

But these bits of embossed paper were most inconvenient and unsatisfactory; and so I began by doubling one fist and putting my fingers in a certain position, and placing the hand so closed inside the letter p, and repeating it so often that she associated in her mind that position of fingers with the letter p. Then I took the same course with another letter which she had learned; and so on through twenty-six letters, irrespective of their alphabetical order, until she came to understand that by a certain position of the fingers she would make three signs, p-i-n, which would signify a pin, just as did the three bits of embossed paper. Thus she was equipped with a better instrument of intercourse; a swifter telegraph from her mind out to ours, which was always at her fingers' end.

This is said in a few minutes; but the process was so slow, so long-protracted, that it would have been wearisome indeed but for the object in view, which was to lead her out of her inward darkness into our blessed light.

It is easy to show the process by which she learned nouns, or names of all sensible objects, but it would take me too long to show the process by which she passed to a knowledge of words expressing relations, and of qualities.

The first step of the transition is easy; for you perceive that there are certain qualities which she could understand, as sweetness in an apple, and by analogy sweetness in temper. She did finally master the names of qualities, and of purely abstract ideas, so that she could read and write and converse, and thus became an intelligent, responsible moral agent, and a happy and useful member of human society, loving many, and beloved of many.

The thing which prompted me to aid her in her first efforts to get out of her dark and silent isolation, and which made me sure of success in my simple method, was the conviction that, though hardly having more intelligence than a dog, she showed the common human desire and capacity to associate names with things, and thoughts of things. She took hold of the thread by which I would lead her out, because she had all the special attributes of a human soul.

No created being devoid of these attributes could do it. Try ye, who believe that an ape or a chimpanzee differs only a degree from man! and though the pupil may have the aid of fine sharp senses, and the help of an academy of philosophers, not even the threshold will be passed; while this child who could not see even a flash of lightning, or hear a crash of thunder, — who had, indeed, but one perfect sense, — went on by aid of that alone until she acquired language; could converse freely and rapidly; could read embossed books and write legible letters; and finally came into sympathetic and affectionate relations with her family and friends; and felt that even her poor life was a precious boon for which she was grateful to its Great Giver, whom she learned to know as her God and Father.

This was very long ago, and I may not have related, in this hasty sketch, the exact order of the different stages of instruction. But you will allow me to quote from an account which I printed concerning the application of this method to another child, a boy of twelve, blind and deaf and dumb. The record states that before entering school, —

> "He was fond of teasing cats, and generally inclined to fun. He could make many of his wants understood by signs. He was, however,

ungovernable, and when thwarted in any way, he became very violent, braying, striking and kicking furiously.

"His signs were expressive, and the strictly natural language, laughing, crying, sighing, kissing, embracing, etc., was perfect. Some of the analogical signs which (guided by his faculty of imitation) he had contrived, were comprehensible, such as the waving motion of his hand for the motion of a boat, the circular one for a wheel, etc. The first object was to break up the use of these signs, and to substitute therefor the use of purely arbitrary ones.

"Profiting by the experience I had gained in the other cases, I omitted several steps of the process before employed, and commenced at once with the finger language. Taking, therefore, several articles having short names, such as key, cup, mug, etc., and with Laura for an auxiliary, I sat down, and taking his hand, placed it upon one of them, and then with my own made the letters, k-e-y. He felt eagerly of my hands with both of his, and on my repeating the process, he evidently tried to imitate the motions of my fingers. In a few minutes he contrived to feel the motions of my fingers with one hand, and holding out the other, he tried to imitate them, laughing most heartily when he succeeded. Laura was by, interested even to agitation, and the two presented a singular sight; her face was flushed and anxious, and her fingers twined in among ours so closely as to follow every motion, but so lightly as not to embarrass them; while Oliver stood attentive, his head a little aside, his face turned up, his left hand grasping mine, and his right held out; at every motion of my fingers his countenance betokened keen attention. There was an expression of anxiety as he tried to imitate the motions — then a smile came stealing out as he thought he could do so, and spread into a joyous laugh the moment he succeeded, and felt me pat his head, and Laura clap him heartily upon the back, and jump up and down in her joy.

"He learned more than a half dozen letters in half an hour, and seemed delighted with his success, at least in gaining approbation. His attention then began to flag, and I commenced playing with him. It was evident that in all this he had merely been imitating the motions of my fingers, and placing his hand upon the key, cup, etc., as part of the process, without any perception of the relation between the sign and the object.

"When he was tired with play I took him back to the table, and he was quite ready to begin again his process of imitation. He soon learned to make the letters for key, pen, pin; and by having the object repeatedly placed in his hand, he at least perceived the relation I wished to establish between them. This was evident, because when I made the letters, p-i-n, or p-e-n, or c-u-p, he would select the article.

"The perception of this relation was not accompanied by that radiant flash of intelligence and that glow of joy which marked the delightful moment when Laura first perceived it. I then placed all the articles on the table, and going away a little distance with the

> children, placed Oliver's fingers in the positions to spell key, on which Laura went and brought the article; the little fellow seemed to be much amused at this, and looked very attentive and smiling. I then caused him to make the letters, b-r-e-a-d, and in an instant Laura went and brought him a piece; he smelled at it, put it to his lips, cocked up his head with a most knowing look, seemed to reflect a moment, and then laughed outright, as much as to say — 'Aha! I understand now how something may be made out of this!' "

But, to return to the mute who is simply deaf. He has, of course, great advantage over poor Laura; but you can see how slow and tedious even with him, this process must be; unless, however, you have some experience in such work, you cannot understand fully its difficulties and imperfection.

In this slow and hard work the deaf-mute child must spend months and years. At the end of five to eight years, when he is fifteen or sixteen years old, he gets in respect to a knowledge of language about where your ordinary children, and even blind children were, at six or seven years old. With the blind child you need not waste a day in teaching language, that is, in giving him command of the instrument of thought, or in providing him with tools for work, while with the poor mute that task must occupy most of your time and efforts.

An eminent teacher of deaf-mutes, Rev. Collins Stone, Principal of the Hartford Asylum, says: "The effort upon which our labor is chiefly expended in the education of the deaf and dumb, is to teach them to use the English language with ease and accuracy. The deaf-mute is shut up to his sad heritage of ignorance and darkness, simply because his peculiar misfortune deprives him of all knowledge of written or spoken language. It leaves him without a medium of communication with others, and seals up from his use the treasures of wisdom contained in books. To teach him the language of the community in which he lives is indispensably necessary, if we would bring him material relief, or break the power of the spell that weighs him down."

But after all; after the mute has spent most of his youth in learning our language, he succeeds very imperfectly, and he goes through life without mastering it thoroughly. Many of you, doubtless, are acquainted with some educated mute, and have, probably, tried to converse with him, either by the finger language or by writing, and you know how very unsatisfactory it is, and how limited is his knowledge of our language. Only the most expert of them can seize upon its nicest parts; and its delicate shades escape them altogether. For instance, they cannot enjoy a pun, or what we call play upon words; and much of the charm of style, and the beauty of poetry, are lost to them.

No deaf-mute becomes a learned man, that is, one who would be considered learned among scholars. Blindness sets no such limits to the range of culture and of scholarship. Men born blind have become eminent as scholars, as poets, as linguists, lecturers, preachers, and even as philosophers; to say nothing of music, in which some have been brilliant composers. The successor of Sir Isaac Newton, in the university chair of philosophy, was a blind man, and lectured with ability and success upon mathematics.

Thus the darkness in which the blind dwell does not prevent them from attaining the highest forms of language, and the fullest development of the social and moral nature; but the silence in which the mutes dwell does prevent them. They, alas! cannot have through childhood, and youth, manhood, and age, that free, constant and intimate social intercourse, which is necessary for the highest development, simply because the chief instrument of human intercourse is language, and that not in its lowest form, but in the highest and most perfect form, or speech. Mutes cannot learn the wonderful language of society, and society will not stop to learn their imperfect one; consequently, they grow up more or less isolated. Now, isolation is stagnation, and complete isolation in youth would be fatal to human development and improvement. Indeed, our word idiot, you know, is derived from an old word signifying the purely individual man — devoid of human relationship.

Mutes may be rescued from entire isolation by the special and difficult instruction given them in our public institutions, which is indeed a noble and blessed work, for although it cannot counteract entirely the effects of their infirmity, it brings them into near and dear relationship with society, by which they should be cherished as childlike and beloved members.

I have said nothing of the vast field of poetry and imagination which is opened to man by the study of music,

"Untwisting all the chains which tie
The hidden soul of harmony."

because I am unequal to the task. But you will easily see how many considerations, drawn from that source might be added to those which I have given, to show the great superiority of hearing over sight as a means of mental and spiritual growth.

Nor does hearing yield to sight the palm of supremacy even for all our relations with the material world. Life to be useful, must be safe. But we walk through the world surrounded with dangers of various kinds; and the warnings of these come mainly through the ear. This is, because during half of the time darkness prevails, and then the sentinel at the eye is off guard; but the one at the ear listens tireless during all the waking hours; and even when the body sleeps it is still half awake, for the ear shuts no lid as the eye does. Then, again, the eye receives no warning except when light strikes nearly from the front. Even with the eyes wide open, one-half the circle around us is unguarded; while the ear gathers in sound not only from all around but from above and below. Unless the rattlesnake be in the direct path, the eye sees him not; but the ear catches the first note of warning, come it from whence it may. Then, again, the thinnest substance may arrest light; but sound traverses thick walls. Besides, sight is more voluntary; hearing more involuntary; indeed, it is almost automatic. You shut out sight easily, but exclude sound with difficulty. You may be blind at will; but you can hardly be deaf even by stopping the ears.

Such are some of the reasons for thinking that blindness is not so dreadful an infirmity, and does not entail such serious consequences as deafness; and to confirm them we have daily evidence that it does not cause so much unhappiness; indeed, that a great many sightless persons are social, cheerful and happy.

Still, the blind, as individuals and as a class, are sorely afflicted, and need the aid of their fellowmen; who are all ready to give it, and require only to know what is the best way.

To find that way requires thought and experience; and probably none of us have yet had enough of them. This much, however, is certain; the aid should not be given in alms, or in any way that savors of alms. Were it possible for government to pension every blind person for life, that would probably do more harm than good. We are safe in saying that as far as possible, they should be considered and treated just as ordinary persons, our equals and friends, are treated, and not singled out as special objects of pity. This is too often forgotten.

The time is past, with us at least, when blindness is considered as a special dispensation of Providence in punishment of a special sin; and yet not long passed, for the Duke of York rudely asked Milton if he did not think he had lost sight as a punishment for writing his Eikonoklastes, and otherwise aiding rebellion against royalty; to which came the swift and fitting answer, "If so, your highness, how was it with your father, who lost all his senses and his head too?"

The blind will always want sympathy, and generally need aid; but they do not want to be segregated from ordinary society, nor to be considered as a class apart.

Common politeness, which is only kindness wisely directed, suggests, that in our intercourse with a blind man we should never needlessly allude to his infirmity, but treat him as if he had none. And common sense suggests that when we would help him, we should do it as we would help any other person; by putting him in the way of helping himself.

Now, as in the treatment of an individual blind man, so should it be with the treatment of the class. The State should admit the right of every child, whether native or foreign, black or white, sound or infirm, to the benefits of instruction at public expense. This is the wise policy of some of our States, where public provision is made for the gratuitous instruction of all children, by placing a free school-house within the reach of every family. As the logical consequences of this policy, if the mode of instruction in those free schools is such that any class of children, as the mutes, the blind, or the feeble-minded, cannot be taught by it, then special instruction is provided for each class; and they are gathered into public institutions, and maintained as well as taught at public charge.

There are some seventeen institutions of this kind for the blind in the United States; and they are generally called charitable; but they ought not to be so considered any more than are the common schools. The parent ought perhaps in most cases to be called upon to pay as much toward the board of his child as it would cost him at home; but no more. The instruction, and the other advantages, are his due; for it is misfortune enough that his child is blind, without his being put to any more expense for schooling than his neighbors are for their children.

If you bear in mind what I said about the evil effects of alms, and of charitable gifts upon the blind, you will see the importance of insisting that blind children shall receive instruction from the State, not as a matter of charity, but as a matter of right.

I wish to make use of this opportunity for criticizing those institutions with a view to their improvement; and this my purpose must be my apology for alluding to the part which I have had in their establishment and organization. I not only organized the first one in the United States, the main features in the administration of which have been widely copied, but labored with more zeal than knowledge to induce people to found others; and made direct efforts to the legislatures of a dozen different States to appropriate money for their support.

I know them, therefore, from their foundation upward; and as their many merits have been freely pointed out to you, I will allude to some of their defects, that you may avoid them in your new establishment.

I accept my full share of condemnation when I say that grave errors were incorporated into the very organic principles of our institutions for the blind, which make them already too much like asylums; which threaten to cause real asylums to grow out of them, and to engender other evils. Let me set forth a little my idea of the general principles which should underlie all such establishments, and which have been too much neglected in the organization of many of our public institutions.

All great establishments in the nature of boarding schools, where the sexes must be separated; where there must be boarding in common, and sleeping in congregate dormitories; where there must be routine, and formality, and restraint, and repression of individuality; where the charms and refining influences of the true family relation cannot be had, — all such institutions are unnatural, undesirable, and very liable to abuse. We should have as few of them as is possible, and those few should be kept as small as possible.

The human family is the unit of society. The family, as it was ordained by our Great Father, with its ties of kith and kin; with its tender associations of childhood and youth; with its ties of affection and of sympathy; with its fireside, its table, and its domestic altar, — there is the place for the early education of the child. His instruction may be had in school; his heart and character should be developed and moulded at home.

Artificial families have been tried and found wanting. Communities in imitation of the natural family, especially those confined to one sex, are fertile of evil. Witness the old nunneries and monasteries, darkened and saddened by lack of the sunlight of affection and love; embittered by petty passions and strife; soured by crushed hopes and yearnings; and defiled by unnatural vices. Witness soldiers in detached garrisons; sailors on long voyages; prisoners under long sentences. Wherever there must be separation of the sexes, isolation from society, absence of true family relation, and monotony of life, there must come evils of various kinds, which no watchfulness can prevent, and no physician can cure.

We should be cautious about establishing such artificial communities, or those approaching them in character, for any children and youth; but more especially should we avoid them for those who have any natural infirmity; or any marked peculiarity of mental organization.

Let me dwell upon this, for in my view, it is very important. Such persons spring up sporadically in the community, and they should be kept diffused among sound and normal persons. Separation, and not congregation, should be the law of their treatment; for out of their infirmity or abnormality there necessarily grow some abnormal and undesirable effects, and unless these be counteracted by education, they disturb the harmonious development of character. These effects are best counteracted by bringing up the child among ordinary children, and subjecting him to ordinary social and family influences; but, on the contrary, they are intensified by constant and close association with children who are marked by the same infirmity or peculiarity.

This truth cannot be gainsaid; nor should the effects of it be disregarded because they seem so slight. As in physics, a force preponderating ever so slightly over other forces, is sure to prevail; so it is in morals. We should therefore keep this truth in mind; and give it due weight when forming plans for the treatment of any special class of persons.

As much as may be, surround insane and excitable persons with sane people, and ordinary influences; vicious children with virtuous people and virtuous influences; blind children with those who see; mute children with those who speak; and the like.

People run counter to this principle for the sake of economy in the expenses, and of some other good end, which they suppose cannot be had in any other way; as when they congregate the insane in hospitals, vicious children in reformatories, criminals in prisons, paupers in almshouses, orphan children in asylums, blind children and mute children in boarding schools. Hence I begin to consider such establishments as evils which must be borne with, for the time, in order to obviate greater evils. I would take heed, however, against multiplying them unnecessarily. I would keep them as small as I could. I would take the most stringent measures for guarding against those undesirable effects which lessen their usefulness; and for finally dispensing with as many of them as may be possible.

But, besides this general objection to such establishments, there is another and more practical objection to the method of congregating for the purpose of education, any class of young persons marked by an infirmity like deafness or blindness. They depend more than ordinary persons do for their happiness and for their support upon the ties of kindred, of friendship, and of neighborhood. All these, therefore, ought to be nourished and strengthened during childhood and youth — for it is then, and then only, that they take such deep root as to become strong, and life-lasting. The home of the blind and of the mute should be his native town or village; there, if possible, he should live during childhood and youth; there he should form his friendships; there, if he comes to need special aid it will be given most readily and fitly; and there his old age will be most cherished. Beware how you needlessly sever any of those ties of family, of friendship, of neighborhood, during the period of their strongest growth, lest you make a homeless man, a wanderer and a stranger. Especially beware how you cause him to neglect forming early relations of affection with those whose sympathy and friendship will be most important to him during life, to wit, those who have all their senses; and how you restrict him to such relations with persons subject to an infirmity like his own.

I would observe, by the way, that the necessity now felt for a new institution in your State has arisen, partly at least, from radical faults in the organization of the old one, which necessarily led to faults in its administration, such as I have noticed. If the conditions of admission had been such as to exclude some who entered, but who ought not to have entered; if the term of residence had not been so long; if stringent measures had been taken to prevent the multiplication of graduates in and about the institution, and to encourage their dispersion and settlement in their several towns, instead of leaving them to congregate in the commercial capital, and to besiege the political capital; if these things had been done, the State would perhaps not now be called upon to incur the cost of building and the continual expense of carrying on a second institution.*

But, it is settled that you are to have one, and, I trust, it will become worthy of the generous motives which prompt its creation; and of the great State which is to build it.

Take heed that it shall be organized on sound principles; and while copying all the good features of existing institutions, avoid those which are not good. Those establishments are all faulty. Not one of them is worthy to be your model in all respects; and the persons who flatter themselves that their favorite one is worthy to be copied exactly, are blind to faults which can be seen by looking beneath the surface. Never mind their showy buildings and special accommodations; you may as well measure the morality of a family by the structure and arrangement of its dwelling-house, as test institutions by their mechanical advantages; but look at the principles and system by which they are conducted. You will, then, find that they are faulty in many respects.

They are generally wrong in receiving pupils too indiscriminately; being, in most cases tempted to do so by the fact that they are paid according to the number they receive. They are wrong in receiving all pupils as boarders, when they should receive those only who cannot board at home, or in private families. They are wrong in associating the blind too closely, and too many years together; thus loosening or breaking the ties of family and of neighborhood, — segregating them from society, — forming a class apart, — creating a feeling of caste, — and so intensifying all the unfavorable effects growing out of the infirmity of blindness. They necessarily encourage intermarriage of the blind; and thus increase the chances of infirm progeny. They attract the blind from the country, and congregate them in the cities. They are creating the necessity, or the demand, for permanent life asylums; all of which consummations are devoutly to be prayed against.

Instead, then, of copying the existing institutions, I think, that in organizing a new one something like the following rough plan should be adopted: —If the field were all clear, and no buildings provided, there should be built only a building for schoolrooms, recitation rooms, music rooms and workshops; and these should be in or near the centre of a dense population. For other purposes, ordinary houses would suffice. But your field is not clear. Your establishment is located, and your building is begun; the organization, however, is not completed.

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* See Note A.

And first as to your Superintendent. Let him be a man who has natural capacity enough for the enterprise. Give him ample power and abundant means, and then hold him to give strict account, and an abundant return of good. But respect his individuality; and let him do his work in his own way, and not in yours. Establish the principles, but leave details and methods of work to him. Give him full sailing directions, but let him be absolute captain of the ship.

You will thus avoid what has been one fertile source of difficulty in our public institutions.

In deciding upon who are to be received as pupils, you should first ascertain how many of the applicants are really blind, and then, instead of imitating the example of ordinary institutions, and getting as many into the school as possible, you should receive as few as possible; that is, you should reject every one who can be taught in common schools. And here, it should be remarked, that it is much easier to have children who are partially blind, and even those totally blind, received and taught in common schools than it was formerly, because the existence of Institutions for the Blind during the third of a century has familiarized people with the fact that sight is not essential for instruction in the common branches. A great many persons have become acquainted with the methods used in the Institutions, and with the use of books in raised letters. I am constantly applied to by teachers to know how to proceed with a blind child; and I always encourage them to keep it at home, and let it go to the common school as long as possible.

But suppose that two hundred candidates present themselves for your Institution; out of these it will be found that from ten to twenty per cent are what we call "seeing blind."

These have a certain degree of sight, and do not belong in a school for the blind. If there were no such school, they would probably attend the common schools, and learn what they could.

Then there will be some, not quite blind who might be taught in common schools if special pains were taken with them, and special encouragement given. Let this be given in the shape of books, slates, maps, etc., and even a small weekly stipend, to be paid on certificate of the teacher, that their attendance had been regular. But they should not be admitted as regular pupils of the Institution, especially if they live near by. It will not be necessary to receive, as boarders, more than half of the applicants as pupils. Let those be taken, not as is usually done for five, or seven years, but on probation for six, or twelve months. Then subdivide these into two classes; those who are to remain not more than a year, and those who are to remain as long as may be necessary. Let the first be taught to read letters in raised print; to write a little; to use the slate and other apparatus adapted to the touch; and to become accustomed to the routine of the instruction and then sent home to attend the common school.

Let them still be considered as beneficiaries of the State, and provided at public expense with books and apparatus, and if they are poor, allowed a small sum weekly toward their support, the balance to be paid by their relatives, or by the town.

After they have been some years in the common schools, some of them will be old enough to go to work, and will find employment; others will desire to return to the Institution, to learn such handicraft as is suitable for them. Keep them about one year and then send them home to work at their trades; and if need be, receive their goods to be sold on their account at the central depot of the Institution.

Then the select pupils, say fifty in number, should have every possible advantage and opportunity for study and improvement. The best masters, the best instruments, and the best opportunities for improvement. They should be kept as long as may be necessary to qualify them to get their own living, as teachers of languages, as vocalists, as tuners of pianos, as organists, and the like.

It should be a general rule, that where children are received as boarders, the parents or friends should be required to pay a small sum, at least equal to what it would actually cost them to board the child at home.

Thus your Institution will best stand that crucial test of excellence among kindred establishments, to wit, giving instruction, aid and assistance to the greatest number of blind persons, while keeping the least number within its walls, and away from their proper homes.

But those who are to organize your Institution, should have something in view beyond instructing and aiding the blind of this generation. They should strive to bring about a condition of society in future generations which will not only prevent the necessity of removing so many blind children from home for instruction, but lessen the number who shall exist at all. As your hospitals for lunatics should be a focus whence go out light and knowledge to all the people concerning the causes of insanity, and the means of its prevention, so your Institution for the Blind should, by means of its reports, and otherwise, diffuse knowledge concerning the hereditary and other causes of imperfect organs of sight; and of those habits and morbid conditions of life which lead to so much blindness in every generation. It should make widely known the fact that there is in your State a constant number of at least twenty-five hundred persons, wholly or partially blind; that each generation is burdened with this number, not from any inherent and essential condition of the physical man, but from a temporary and remediable one; and that the blindness of so many is phenomenal, not essential; that is, dependent upon the physical condition of the people, which may be varied at human will.

Teach that the average number of blind, dumb, insane, idiotic and other defectives, is a sure test of the average physical condition of the people; that is, of the purity of the human stock; and that number will be higher or lower according as they obey or violate God's laws. In other words, it is a test of the degree in which they lead religious or sinful lives, "for sin is the transgression of the law." Tried by this test, their lives are sinful; for there are now in this State at least fifteen thousand of the defective class; and at least as many more who inherit from birth such strong animal appetities, and such feeble restraining powers, that they are not free moral agents; that is, they are not, and cannot be, a law unto themselves. These thirty thousand are for the most part, what they are, by reason of organic and inherited physical imperfections; "The fathers ate sour grapes, and the children's teeth are set on edge."

All these infirm or enfeebled conditions which we deplore, are punishments of transgressions of some law. But although God's punishments can neither be pardoned, nor evaded, they are temporary, not eternal; merciful, not wrathful; prospective, not retrospective in their purpose; remedial, not vengeful in their operation.

It lies therefore with this generation to modify the physical condition, and through that the moral condition of the next, and of the next. Whoever knows this, and feels that he himself can live up to his light — that he can obey the natural laws, "that he can be a law unto himself," has little faith in humanity if he doubts the capacity of the people at large to stand finally where he stands.

The body is declared to be "the temple of the Holy Ghost;" by which I understand, the dwelling, and the instrument of the soul; and I entreat attention to the importance of having the temple "swept and garnished," and the instrument put into the best possible condition, as a means of attaining to the highest spiritual excellence, by the greatest possible number of people.

I regard every well ascertained natural law as a divine law, the binding force of which would not be increased by thunders from Sinai. New revelations of these laws are continually vouchsafed; and among them that which indicates that our spiritual growth and power depend upon the quality and condition of our physical system; which are greatly variable at human will.

My deep convictions upon this subject, and the earnestness of my purpose, must be my apology (if any be needed,) for plainness of speech and directness of comparison.

Let us suppose, then, that to every generation of horses or cattle in your State, thirty thousand were born infirm, defective, shorn of a sense, or otherwise worthless, think you that your farmers, who can breed horses of any size, shape, or color; who can breed cattle with long horns, short horns, or no horns at all, — think you they would not find of what transgression of law these defects are the punishment, and hasten to obey it? And if people can be moved to do this by the mere love of gain, how much more when moved by that mighty moral force, parental love?

Time will not permit me to enlarge upon this subject. You may regard me as an optimist; but my faith in the elevation and improvement of man's physical condition, as a step toward his moral elevation, springs from my faith in the love and good will of the Great Father, who breathed into his children a part of his divine spirit, which, from its very essence, must grow brighter and brighter until the perfect day.

May his blessing rest upon the work which you this day begin.

NOTE A.

Page 184.

While these sheets were passing through the press, I submitted this paragraph to two persons who are familiar with the facts, and asked whether, in their opinion, it was correct, and ought to be published, or not.

The first replied, "If among faults of organization you include those which give rise almost necessarily to difficulties and mistakes in administration, then it is strictly true; and it ought to be published for the good of the cause."

The second said, "I think you entirely misapprehend the true nature of the cause or necessity which led to the establishment of a second Institution for the Blind." * * *

He did not object to the publication of the paragraph, but I inferred from his language that it would not be agreeable; and as he is officially connected with the old Institution, I should have stricken it out, from respect to him and his fellow-workers; if he had not added, what struck me as portentous words: "The real and true necessity for another Institution was the great number of helpless and harmless blind in the State; and it was owing to the number, condition and necessities of this class that a new Institution was established; the object being to provide a home or asylum for them."

Such language from a person in his position gives me serious concern; for though I think he is mistaken with regard to certain facts, his words show how strong and prevalent is the common idea, that an asylum or home, is necessary and even desirable, for the helpless and homeless blind.

Against this idea I protest earnestly; not only because it is erroneous; but because it may be harmful. It is sure indeed to disappear when the principles which ought to guide public charity are better understood; but should it, in the meantime, be adopted in the organization of the New York State Institution, my hopes of the true greatness and beneficent influences of that establishment will be blighted in the bud.

S. G. H.

AAWB
Blindness 1965

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